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Iran Nuclear Agreement

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Summary

On July 14, 2015, Iran and the six powers that have negotiated with Iran about its nuclear program since 2006 (the United States, the United Kingdom, France, Russia, China, and Germany—collectively known as the P5+1) finalized a Joint Comprehensive Plan of Action (JCPOA). The JCPOA is intended to ensure that Iran's nuclear program can be used for purely peaceful purposes, in exchange for a broad lifting of U.S., European Union (EU), and United Nations (U.N.) sanctions on Iran. The JCPOA largely reflects what was agreed in an April 2, 2015, framework for the accord. The agreement replaces a Joint Plan of Action (JPA) interim nuclear accord in operation since January 2014. A resolution of disapproval of the JCPOA was not enacted by Congress by the deadline of September 17, 2015, set by the Iran Nuclear Agreement Review Act (P.L. 114-17). Iran's legislature approved the agreement and the JCPOA formally took effect on "Adoption Day" (October 18, 2015), the date stipulated by the JCPOA as 90 days after passage of Resolution 2231 of July 20, 2015). On Adoption Day, the Administration issued provisional waivers for U.S. sanctions laws. Those waivers took effect—along with the revocation of some sanctions imposed by executive order—when the International Atomic Energy Agency (IAEA) certified that Iran had complied with the initial set of nuclear-related requirements and "Implementation Day" was declared by the P5+1 on January 16, 2016. In the 114th Congress, some legislation has been introduced with the stated purpose of redressing asserted weaknesses of the deal.

President Obama and other P5+1 leaders have asserted that the JCPOA represented the most effective means to ensure that Iran cannot obtain a nuclear weapon. U.S. officials also assert that all U.S. options to prevent Iran from developing a nuclear weapon remain available even after the key nuclear restrictions of the JCPOA expire, and that the JCPOA contains provisions for U.N. sanctions to be reimposed if Iran violates its commitments under the JCPOA. Some experts assert that it is difficult to predict whether international governments would reimpose sanctions.

Critics of the agreement, including some U.S. allies in the Middle East, express concerns that the extensive sanctions relief be provided under the accord give Iran additional resources to extend its influence in the region. Critics also assert that the lifting of a U.N. prohibition on arms sales to Iran or arms exports by Iran in five years, and on Iran's development of nuclear-capable ballistic missiles within eight years, will set the stage for Iran to emerge as a key regional actor. These commitments are stated in U.N. Security Council Resolution 2231, which is the one operative Resolution still in effect, as of Implementation Day. Some U.S. regional allies express concerns that the JCPOA could produce a broader U.S.-Iran rapprochement that could cause the United States to reduce its commitments to their security. Other critics have said that the JCPOA did not require that Iran cease support for groups that conduct acts of international terrorism. Most of the U.S.-Iran dual nationals held by Iran were released on Implementation Day after separate but parallel negotiations.

The Administration asserts that it is undertaking numerous initiatives to counter Iran's destabilizing activities in the Middle East and can address such issues as Iran's human rights practices, ballistic missile development, and other issues through other policies and initiatives. President Obama has said that the Administration is "not counting on" a broader change in Iranian behavior, and neither he nor any other U.S. official indicated that Implementation Day and the prisoner releases would quickly lead to a restoration of formal U.S.-Iran diplomatic relations. Iran's continued support for the regime of President Bashar Al Assad and other pro-Iranian factions and governments and its conduct of ballistic missile tests suggest that the JCPOA has not reduced Iran's commitment to pursuing what it asserts are its core security and foreign policy interests.

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Introduction

Multilateral negotiations regarding Iran's nuclear program date back to 2003 after the International Atomic Energy Agency (IAEA) reported on the existence of clandestine nuclear facilities at Natanz. In October of that year, Iran concluded an agreement with France, Germany, and the United Kingdom under which Iran temporarily suspended aspects of its nuclear program, including enrichment of uranium, and signed an Additional Protocol to its IAEA safeguards agreement, but also asserted its right to develop nuclear technology. In January 2006, Tehran announced that it would resume research and development on its centrifuges at Natanz. After that time, Iran held multiple rounds of talks with China, France, Germany, Russia, the United Kingdom, and the United States (collectively known as the P5+1). As part of the diplomatic efforts, the U.N. Security Council adopted several resolutions, the most recent and sweeping of which (Resolution 1929) was adopted in June 2010. These resolutions required Iran to cooperate fully with an ongoing IAEA investigation of its nuclear activities, suspend its uranium enrichment program, suspend its construction of a heavy water reactor and related projects, and ratify the Additional Protocol to its IAEA safeguards agreement. Resolution 1929 also required Tehran to refrain from "any activity related to ballistic missiles capable of delivering nuclear weapons" and to comply with a modified provision (called code 3.1) of Iran's subsidiary arrangement to its IAEA safeguards agreement.[1] Several of these resolutions imposed economic and other sanctions on Iran.

Diplomacy bore fruit after the June 2013 election of Iranian President Hassan Rouhani with the achievement on November 24, 2013, of an interim nuclear accord—the Joint Plan of Action (JPA; referred to in international documents as JPOA). The JPA set out an approach toward reaching a long-term comprehensive solution to international concerns regarding Iran's nuclear program. The two sides began implementing the JPA on January 20, 2014. The P5+1 and Iran reached a framework of a Joint Comprehensive Plan of Action (JCPOA) on April 2, 2015, and the JCPOA was finalized on July 14, 2015. According to an August 2015 report from IAEA Director-General Yukiya Amano, the IAEA stated that it would continue conducting JPA-related monitoring activities "until the date on which the JCPOA is implemented."[2] The IAEA certified on January 16, 2016, that Iran had completed its required JCPOA nuclear-related tasks for Implementation Day. The United States, the U.N., and the EU ceased application of specific sanctions that same day. The agency has since stopped its JPA-related monitoring and has been "verifying and monitoring the implementation by Iran of its nuclear-related commitments under the JCPOA," according to a February 26 report from Amano.[3]

Coinciding with concluding the JPA, Iran signed a joint statement with the IAEA on November 11, 2013, describing a "Framework for Cooperation."[4] According to the statement, Iran and the IAEA agreed to "strengthen their cooperation and dialogue aimed at ensuring the exclusively

[1] Iran is a party to the nuclear Non Proliferation Treaty (NPT) and has concluded a comprehensive safeguards agreement with the IAEA. Such agreements are designed to enable the IAEA to detect the diversion of nuclear material from peaceful purposes to nuclear weapons uses, as well as to detect undeclared nuclear activities and material. For more information, see CRS Report R40094, *Iran's Nuclear Program: Tehran's Compliance with International Obligations*, by (name redacted)

[2] *Verification and Monitoring in the Islamic Republic of Iran in light of United Nations Security Council Resolution 2231 (2015*), Report by the Director General, International Atomic Energy Agency, GOV/2015/53, August 14, 2015.

[3] *Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015)*, Report by the Director General, GOV/2016/8, February 26, 2016.

[4] Available at http://www.iaea.org/press/?p=4018.

peaceful nature of Iran's nuclear programme through the resolution of all outstanding issues that have not already been resolved by the IAEA." The agency had long sought to resolve some outstanding questions regarding Tehran's nuclear program, some of which concern possible Iranian research on nuclear weapons development. Amano issued the IAEA's "Final Assessment on Past and Present Outstanding Issues Regarding Iran's Nuclear Programme" on December 2.[5]

Background on Iran's Nuclear Program[6]

Iran has nuclear programs that could potentially provide Tehran with the capability to produce both weapons-grade highly enriched uranium (HEU) and plutonium—the two types of fissile material used in nuclear weapons. (In addition to the production of weapons-grade nuclear material, a nuclear weapons program requires other key elements, such as warhead design and reliable delivery systems [see **Appendix B**].) Statements from the U.S. intelligence community indicate that Iran has the technological and industrial capacity to produce nuclear weapons at some point, but the U.S. government assesses that Tehran has not mastered all of the necessary technologies for building a nuclear weapon.[7]

A November 2007 National Intelligence Estimate[8] assessed that Iran "halted its nuclear weapons program" in 2003[9] but the estimate, and subsequent statements by the intelligence community, also assessed that Tehran was keeping open the "option" to develop nuclear weapons.[10] Then Under Secretary of State for Political Affairs Wendy Sherman explained during an October 3, 2013, Senate Foreign Relations Committee hearing that Iran would need as much as one year to produce a nuclear weapon if the government made the decision to do so.[11] At the time, Tehran would have needed two to three months of this time to produce enough weapons-grade HEU for a nuclear weapon.[12] Iran's implementation of the JCPOA lengthened this time to one year, according to February 9, 2016, Congressional testimony from Director of National Intelligence James Clapper.[13] (See "Major Nuclear Provisions of the JCPOA").

[5] *Final Assessment on Past and Present Outstanding Issues Regarding Iran's Nuclear Programme*, GOV/2015/68, December 2, 2015.

[6] For more information, see CRS Report RL34544, *Iran's Nuclear Program: Status*, by (name redacted)

[7] "Press Briefing by Senior Administration Officials on IAEA Report on Iran's Nuclear Activities," November 8, 2011. Ambassador Stephen D. Mull, Coordinator for Implementation of the JCPOA, told a Washington audience on January 21, 2016, that "there was a portion of the Iranian Government working in a very organized, systematic way to develop the capability to build a nuclear weapon. We don't know to the extent to which that knowledge has been tested or even survived." ("Implementation of the Joint Comprehensive Plan of Action," Washington Foreign Press Center, January 21, 2016).

[8] "Iran: Nuclear Intentions and Capabilities," National Intelligence Estimate, November 2007.

[9] The estimate defined "nuclear weapons program" as "nuclear weapon design and weaponization work and covert uranium conversion-related and uranium enrichment related work."

[10] See, for example, Director of National Intelligence James Clapper's February 26, 2015, testimony before the Senate Armed Services Committee (Statement for the Record, *Worldwide Threat Assessment of the U.S. Intelligence Community*, February 26, 2015).

[11] This estimate assumes the necessary time to produce a sufficient amount of weapons-grade HEU and complete the remaining steps necessary for an implosion-style nuclear explosive device suitable for explosive testing. (Conversation with U.S. official, July 21, 2015.); "Reversing Iran's Nuclear Program," Senate Foreign Relations Committee, October 3, 2013.

[12] The White House. "Parameters for a Joint Comprehensive Plan of Action Regarding the Islamic Republic of Iran's Nuclear Program." April 2, 2015.

[13] *Statement for the Record Worldwide Threat Assessment of the US Intelligence Community*, Senate Armed Services Committee, February 9, 2016.

U.S. officials argue that the IAEA and/or U.S. intelligence would likely detect an Iranian attempt to use its safeguarded facilities for producing weapons-grade HEU.[14] The intelligence community assesses that Iran, if it were to decide to do so, is more likely to produce weapons-grade HEU covertly, Director Clapper stated in a March 2015 interview.[15] But U.S. officials also express confidence in the ability of U.S. intelligence to detect Iranian covert nuclear facilities[16] and have argued that Iran currently does not appear to have any nuclear facilities of which the United States is unaware. CIA Director John Brennan stated during a March 2015 interview that the United States has "a good understanding of what the Iranian nuclear program entails."[17] During a July 31, 2015, press briefing about possible Iranian undeclared nuclear facilities, U.S. Secretary of Energy Ernest Moniz stated that "we feel pretty confident that we know their current configuration." Clapper testified that the JCPOA

> has also enhanced the transparency of Iran's nuclear activities ... [a]s a result, the international community is well postured to quickly detect changes to Iran's declared nuclear facilities designed to shorten the time Iran would need to produce fissile material.[18]

President Obama has said that the goal for the JCPOA was to increase the time needed for Iran to produce enough fissile material for one nuclear weapon to between six months and one year, as well as to improve the international community's ability to detect such a scenario.[19]

IAEA Safeguards

The IAEA's ability to inspect and monitor nuclear facilities in, as well as to obtain information from, a particular country pursuant to that government's comprehensive safeguards agreement has been limited to facilities and activities that have been declared by the government. Additional Protocols to IAEA comprehensive safeguards agreements increase the agency's ability to investigate undeclared nuclear facilities and activities by increasing the IAEA's authority to inspect certain nuclear-related facilities and demand information from member states. Iran signed such a protocol in December 2003 and agreed to implement the agreement pending ratification. However, following the 2005 breakdown of limited agreements with the European countries to suspend uranium enrichment, Tehran stopped adhering to its Additional Protocol in 2006.[20]

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[14] "Hearing on Security Threats to the United States," Senate Select Committee on Intelligence, March 12, 2013. Then-IAEA Deputy Director General for Safeguards Herman Nackaerts stated in July 2013 that the IAEA "would know within a week," if Iran were to use its safeguarded facilities to produce weapons-grade HEU. (Barbara Slavin, "Tight IAEA Inspection Regime Hampers Iran's Nuclear Breakout," *Al-Monitor*, July 22, 2013.)

[15] PBS "Charlie Rose" Interview with James Clapper, Director of National Security, March 3, 2015.

[16] "Senior Administration Official Holds A Background Briefing Previewing Iran P5+1 Talks," November 6, 2013; Colin H. Kahl, "Not Time to Attack Iran: Why War Should Be a Last Resort," *Foreign Affairs*, January 17, 2012. However, Director of National Intelligence Clapper stated in a February 2015 hearing that, although the United States has "a reasonably capable intelligence capability," IAEA safeguards would be an "important aspect of any sort of agreement we might reach with the Iranians" (*Worldwide Threat Assessment of the U.S. Intelligence Community*, February 26, 2015).

[17] "Exclusive: CIA Director John Brennan Provides Insight into Agency Overhaul to Face Modern Threats," *Fox News Sunday*, March 22, 2015.

[18] *Statement for the Record Worldwide Threat Assessment of the US Intelligence Community*, February 9, 2016.

[19] "Exclusive: Full Text of Reuters Interview with Obama," *Reuters*, March 2, 2015. Also see Deputy Secretary of State Antony Blinken's testimony before the House Committee on Foreign Affairs March 19, 2015.

[20] Iran announced that it would stop implementing the protocol two days after the IAEA Board of governors adopted a resolution in February 2006 which referred Iran's noncompliance with its IAEA safeguards agreement to the U.N. Security Council.

Subsidiary arrangements to IAEA safeguards agreements describe the "technical and administrative procedures for specifying how the provisions laid down in a safeguards agreement are to be applied."[21] Code 3.1 of Iran's subsidiary arrangement to its IAEA safeguards agreement requires Tehran to provide design information for new nuclear facilities "as soon as the decision to construct, or to authorize construction, of such a facility has been taken, whichever is earlier."

Declared Iranian Nuclear Facilities[22]

Iran has not built any new nuclear facilities or expanded the existing ones since beginning implementation of the JPA in January 2014. Iran operates a Russian-built nuclear power reactor, for which Russia is providing fuel until 2021. The JCPOA focuses on Iran's enrichment program and its heavy water reactor due to their potential for nuclear weapons material production, and all the facilities discussed below are addressed in the JCPOA.

Iran has three gas centrifuge enrichment facilities (Natanz Fuel Enrichment Plant, Natanz Pilot Fuel Enrichment Plant, and Fordow Fuel Enrichment Plant). Gas centrifuges enrich uranium by spinning uranium hexafluoride gas at high speeds to increase the concentration of the uranium-235 isotope. Such centrifuges can produce low-enriched uranium (LEU), which can be used for fuel in nuclear power reactors or research reactors, and weapons-grade highly enriched uranium (HEU). LEU used in nuclear power reactors typically contains less than 5% uranium-235; research reactor fuel can be made using 20% uranium-235; HEU used in nuclear weapons typically contains about 90% uranium-235. Tehran argues that it is enriching uranium for use as fuel in nuclear power reactors and nuclear research reactors.

- **Natanz Commercial-Scale Fuel Enrichment Plant**. In this facility, Iran is using first-generation centrifuges, called IR-1 centrifuges, to produce LEU containing up to 5% uranium-235. As of November 2013, Iran had installed about 15,400 of these centrifuges, approximately 8,800 of which are enriching uranium. Iran had also installed about 1,000 centrifuges with a greater enrichment efficiency, called IR-2m centrifuges, in the facility. The IR-2m centrifuges are not enriching uranium.
- **Natanz Pilot Fuel Enrichment Plant**. Iran had been using IR-1 centrifuges in this facility to produce LEU containing approximately 20% uranium-235 until halting this work pursuant to the JPA. Tehran's production of LEU enriched to the 20% level has caused concern because such production requires approximately 90% of the effort necessary to produce weapons-grade HEU, which, as noted, contains approximately 90% uranium-235.[23] Iran is testing other centrifuge models in this facility under IAEA supervision, but such work was monitored by the IAEA, even before the JPA (see below) limited this testing.

[21] *2001 IAEA Safeguards Glossary*. Available at http://www-pub.iaea.org/books/IAEABooks/6570/IAEA-Safeguards-Glossary-2001-Edition.

[22] Unless otherwise noted, this section is based on CRS Report RL34544, *Iran's Nuclear Program: Status*, by (name redacted), and reports from IAEA Director-General Yukiya Amano to the IAEA Board of Governors: GOV/2013/27 (May 2013), GOV/2013/40 (August 2013), GOV/2013/56 (November 2013, and GOV/2015/34, (May 2015).

[23] Former IAEA Deputy Director General Olli Heinonen, "Dealing with a Nuclear Iran: Redlines and Deadlines," Center for Strategic and International Studies, February 6, 2013; U.S. Secretary of Energy Ernest Moniz, Senate Committee on Armed Services, "Impacts of the Joint Comprehensive Plan of Action (JPCOA) on U.S. Interests and the Military Balance in the Middle East," July 29, 2015.

- **Fordow Fuel Enrichment Plant**. Iran was using IR-1 centrifuges in this facility to produce LEU containing approximately 20% uranium-235 until the JPA took effect. Iran has installed about 2,700 first-generation centrifuges, approximately 700 of which were enriching uranium.
- **Arak Heavy Water Reactor**. Iran has been constructing a heavy water-moderated reactor at Arak, a type of reactor that produces spent fuel containing plutonium that is better-suited for nuclear weapons than plutonium produced by light water-moderated reactors.[24] Tehran has asserted that the reactor is intended to produce radioisotopes for medical use and to replace the Tehran Research Reactor. Heavy water production requires a separate production plant, which Iran possesses. The Arak reactor, if it were completed, could produce enough plutonium for between one and two nuclear weapons per year.[25] However, plutonium must be separated from the used fuel—a procedure called "reprocessing." Iran has always maintained that it would not engage in reprocessing. Prior to the JPA, Tehran notified the IAEA that it had produced enough heavy water to commission the reactor, but the JPA limited further development of the facility.

The "Joint Plan of Action" (JPA)

The JPA, also widely known as the JPOA, essentially froze most aspects of Iran's nuclear program to allow time to negotiate the JCPOA. When the JPA went into effect in January 2014, Iran had enough uranium hexafluoride containing up to 5% uranium-235, which, if further enriched, would have yielded enough weapons-grade HEU for as many as eight nuclear weapons.[26] The total amount of Iranian LEU containing 20% uranium-235 would, if it had been further enriched, have been sufficient for a nuclear weapon. After the JPA went into effect, Iran either converted much of that material for use as fuel in a research reactor located in Tehran (called the Tehran Research Reactor), or prepared it for that purpose.[27] Iran diluted the rest of that stockpile so that it contained no more than 5% uranium-235. Tehran's uranium conversion facility is not set up to reconvert the reactor fuel to uranium hexafluoride.[28] According to a November 14, 2013, IAEA report, Iran had generally stopped expanding its enrichment and heavy water reactor programs during the negotiations leading up to the JPA.[29]

[24] Both the Tehran Research Reactor and the Bushehr reactor are light-water reactors.

[25] Kahl, May 14, 2015.

[26] Colin Kahl, Deputy Assistant to the President and National Security Adviser to the Vice President, "Arms Control Association Annual Meeting: Unprecedented Challenges for Nonproliferation and Disarmament," May 14, 2015.

[27] This process has generated scrap which contains LEU with 20% uranium-235. Iran also retains .6 kilograms of uranium hexafluoride containing 20% uranium-235, which "had been used as reference material for mass spectrometry" (*Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran*, Report of the Director General, International Atomic Energy Agency, GOV/2015/34, May 29, 2015).

[28] *Nuclear Industry in Iran: An Overview on Iran's Activities and Achievements in Nuclear Technology*, Atomic Energy Organization of Iran, 2012, p. 13. Also see GOV/2015/34.

[29] *Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council Resolutions in the Islamic Republic of Iran*, GOV/2013/56, November 14, 2013.

Nuclear Program Provisions Under the JPA[30]

Under the JPA, Iran agreed to refrain from "any further advances of its activities" at the Natanz commercial-scale facility, Fordow facility, and Arak reactor. Tehran was also required to provide the IAEA with additional information about its nuclear program, as well as access to some nuclear-related facilities to which Iran's IAEA safeguards agreement does not require access.

- **Centrifuge Limits**. The JPA required Iran to refrain from feeding uranium hexafluoride into its installed centrifuges that were not previously enriching uranium, to replace existing centrifuges only with "centrifuges of the same type," and to produce centrifuges only to replace damaged centrifuges. Tehran was also required to refrain from installing additional centrifuges at the Natanz facility. Iran was permitted to use its previously operating centrifuges in the Natanz commercial facility and the Fordow facility to produce enriched uranium containing as much as 5% uranium-235.
- **Level of Enrichment Limits**. Iran could only enrich uranium up to 5% uranium-235. Tehran was also to dilute half of its stockpile of uranium hexafluoride containing 20% uranium-235 to no more than 5% uranium-235. The rest of the uranium hexafluoride containing 20% uranium-235 was to be converted to uranium oxide for use as fuel for the Tehran Research Reactor.[31] Iran also agreed to refrain from building a line in its uranium conversion facility for reconverting the uranium oxide back to uranium hexafluoride.
- **LEU Stockpile Limits**. Iran was required, in effect, to freeze the amount of stocks of enriched uranium hexafluoride containing up to 5% uranium-235.[32]
- **Centrifuge R&D**. Iran was permitted to continue its "current enrichment R&D Practices" under IAEA safeguards, "which are not designed for accumulation of the enriched uranium." This provision prohibited Tehran from producing enriched uranium hexafluoride containing more than 5% uranium-235.
- **Additional Monitoring**. The JPA provided for additional IAEA monitoring of the enrichment facilities by allowing IAEA inspectors to access video records from those facilities on a daily basis. Previously, inspectors did not access such records daily (and the video is not streamed in real time to the agency).[33]
- **Arak Reactor**. Iran pledged to refrain from commissioning the reactor, transferring fuel or heavy water to the reactor site, testing and producing additional reactor fuel, and installing remaining reactor components. The JPA allowed Tehran to continue some construction at the reactor site and to produce

[30] Unless otherwise noted, this section is based on the agreement text (available at http://eeas.europa.eu/statements/docs/2013/131124_03_en.pdf), "Background Briefing by Senior Administration Officials on First Step Agreement on Iran's Nuclear Program," November 24, 2013, and GOV/2013/56.

[31] This material is unsuitable for further enrichment. Uranium hexafluoride is the form of uranium used as feedstock for centrifuge enrichment.

[32] Iran began operating a conversion plant for this purpose in July 2014.

[33] Then-deputy National Security Adviser Anthony Blinken stated in a November 25, 2013, television interview that such access would enable IAEA inspectors to detect Iranian efforts to produce weapons-grade HEU at its declared enrichment facilities "almost instantaneously." However, as noted, U.S. officials have previously expressed confidence in the IAEA's ability to detect such Iranian efforts; the extent to which the November 24, 2013, agreement improved this ability is unclear.

some reactor components off-site. Iran also agreed to refrain from reprocessing spent nuclear material and building a reprocessing facility.[34]

- **Additional Pledges/Information**. The JPA reiterated previous Iranian statements "reaffirm[ing] that under no circumstances will Iran ever seek or develop any nuclear weapons." In addition, Iran was to provide the IAEA with other information, such as plans for future nuclear facilities. Tehran was already required to provide some of this information by code 3.1 of Iran's subsidiary arrangement to its IAEA safeguards agreement. Iran also provided IAEA inspectors with "managed access" to its centrifuge assembly workshops, centrifuge rotor production workshops, centrifuge storage facilities, and uranium mines and mills.[35]

"Right to Enrichment"

The JPA acknowledged that Iran's right to the peaceful use of nuclear energy under the nuclear Non-Proliferation Treaty (NPT) will be part of a comprehensive solution, but shied away from stating that enrichment is part of this right. It stipulated that an enrichment program in Iran would have defined limits and transparency measures.[36] The Obama Administration applied to Iran the Administration argument that the NPT does not contain an explicit right to enrichment. A senior Administration official explained on November 24, 2013, that "the United States has not recognized a right to enrich for the Iranian government, nor do we intend to. The document does not say anything about recognizing a right to enrich uranium."[37] (Similarly, the JCPOA states that, if the JCPOA is fully and successfully implemented, Iran will "fully enjoy its right to nuclear energy for peaceful purposes under the relevant [NPT] articles ... in line with its obligations therein, and the Iranian nuclear program will be treated in the same manner as that of any other non-nuclear-weapon state party to the NPT.")

Sanctions Easing Under the JPA

The JPA provided for what the Administration terms "limited, temporary, targeted, and reversible" sanctions relief for Iran.[38] Almost all U.S. sanctions laws provide the President with waiver authority, as well as the power to determine sanctions violations. Sanctions imposed only

[34] There is no public official evidence that Iran has a reprocessing facility.

[35] According to the IAEA, "managed access" to nuclear-related facilities is "arranged in such a way as 'to prevent the dissemination of proliferation sensitive information, to meet safety or physical protection requirements, or to protect proprietary or commercially sensitive information. Such arrangements shall not preclude the Agency from conducting activities necessary to provide credible assurance of the absence of undeclared nuclear material and activities at the location in question." (*2001 IAEA Safeguards Glossary*.)

[36] Tehran has long argued that it has the right to enrich uranium pursuant to the NPT, Article IV of which states, in part, that nothing in the treaty "shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity" with the NPT's nonproliferation provisions. For example, Iran demanded in a 2012 proposal to the P5+1 that those countries recognize and announce "Iran's nuclear rights, particularly its enrichment activities, based on NPT Article IV." Available at http://www.armscontrol.org/factsheets/Iran_Nuclear_Proposals.

[37] "Background Briefing By Senior Administration Officials On First Step Agreement On Iran's Nuclear Program," November 24, 2013.

[38] White House Office of the Press Secretary. "Fact Sheet: First Step Understandings Regarding the Islamic Republic of Iran's Nuclear Program." November 23, 2013.

by executive order can be eased by a superseding order.[39] Its provisions, which remained in force until "Implementation Day" (January 16, 2016), included the following:

- **Access to Some Hard Currency**. Iran was able to repatriate $700 million per month in hard currency from oil sales, and to access an additional $65 million per month of its foreign exchange reserves for tuition for Iranian students abroad.
- **Oil Exports Capped**. Iran's oil exports were required to remain at their December 2013 level of about 1.1 million barrels per day (mbd). However, Iran's sales of oil products such as condensates were not specifically prohibited by the JPA, making Iran's practical level of sales during the JPA about 1.3 mbd - nearly 50% drop from 2011 levels of about 2.5 million barrels per day.
- **Resumption of Trade in Selected Sectors.** The JPA suspended U.S. and international sanctions on Iran's sales of petrochemicals, trading in gold and other precious metals, and transactions involving Iran's auto production sector.

The Joint Comprehensive Plan of Action (JCPOA)

The JPA previewed a Joint Comprehensive Plan of Action (JCPOA) by stating that a JCPOA was to be concluded "no more than one year after the adoption" of the JPA (by November 24, 2014) and include a "mutually defined [Iranian] enrichment programme with practical limits and transparency measures to ensure the peaceful nature of the programme." Specifically, Iran and the P5+1 were to reach agreement on permanent, comprehensive sanctions relief in exchange for restrictions on the "scope and level" of Iran's enrichment activities, the capacity and location of Iranian enrichment facilities, and the size and composition of Tehran's enriched uranium stocks "for a period to be agreed upon." Tehran would be obligated to "resolve concerns related to" the Arak reactor, refrain from reprocessing spent nuclear fuel or constructing a facility "capable of reprocessing," implement "agreed transparency measures and enhanced monitoring," and ratify and implement its Additional Protocol. Following successful implementation of the final steps of the JCPOA, Iran's nuclear program would be treated in the same manner as that of any non-nuclear weapon state party to the NPT. Iran's IAEA safeguards obligations last for an indefinite duration. Potential nuclear-related exports to Iran remain subject to the Nuclear Suppliers Group's export guidelines.[40]

P5+1-Iran negotiations on a comprehensive settlement began in February 2014 but did not make sufficient progress to meet the July 20, 2014, or subsequent November 24, 2014, deadlines for a JCPOA. On November 24, 2014, Iran and the P5+1 announced that they were extending the talks—and all provisions of the JPA—with the intent of finalizing a detailed agreement by June 30, 2015, stating that they would first attempt to reach an overarching framework and roadmap for the agreement "within four months." The framework accord was agreed on April 2, 2015, in Lausanne, Switzerland.[41] The parties strived to meet the June 30 deadline to finalize a JCPOA to

[39] For information on the use of waivers and other authorities to implement the sanctions relief of the JPA, see CRS Report R43311, *Iran: U.S. Economic Sanctions and the Authority to Lift Restrictions*, by (name redacted) , and CRS Report RS20871, *Iran Sanctions*, by (name redacted) .

[40] For information about the Nuclear Suppliers Group, see CRS Report RL33865, *Arms Control and Nonproliferation: A Catalog of Treaties and Agreements*, by (name redacted), (name redacted), and (name redacted) .

[41] The text of the framework accord is at The White House. "Parameters for a Joint Comprehensive Plan of Action Regarding the Islamic Republic of Iran's Nuclear Program." April 2, 2015. U.S. Secretary of Energy Ernest Moniz described this timeline as "very, very conservative" in an April 2015 interview (Michael Crowley, "Ernest Moniz: Iran Deal Closes Enrichment Loophole," *Politico,* April 7, 2015).

meet a congressional requirement for a 30-day review period under the Iran Nuclear Agreement Review Act (P.L. 114-17). However, because the JCPOA was not finalized until July 14, 2015, a 60-day review period was triggered under that act. The provisions of the JPA remain in effect until the JCPOA is formally "adopted," as discussed below.

Overview Timeline of Implementing the JCPOA

The JCPOA outlines specified steps that are to take place, as follows:

- **Finalization Day: July 14, 2015.** Iran and the P5+1 countries, along with the High Representative of the European Union for Foreign Affairs and Security Policy (Frederica Mogherini), endorsed the JCPOA. A U.N. Security Council Resolution to endorse the JCPOA was submitted for adoption.
- **Adoption Day/New U.N. Security Council Resolution**. The JCPOA formally came into effect 90 days after endorsement of JCPOA by U.N. Security Council, or earlier by mutual consent. Resolution 2231 was adopted for that purpose on July 20, 2015, placing Adoption Day at October 18, 2015. The Administration asserted that the 90-day timeframe allowed for review of the JCPOA by the U.S. Congress and by any other legislature of Iran or the other P5+1 states. On Adoption Day, the United States issued the provisional presidential waivers required to implement U.S. sanctions relief, with the waivers to formally take effect on Implementation Day.
- **Implementation Day.** This day was defined in the JCPOA as the day the IAEA verified that Iran has completed the several stipulated nuclear related measures (e.g., reducing centrifuges, removing the core of the Arak reactor) and the United States, the U.N., and the EU cease application of specific sanctions (see text below). The U.N. Security Council terminated the provisions of its resolutions on Iran: 1696 (2006), 1737 (2006), 1747 (2007), 1803 (2008), 1835 (2008), 1929 (2010), and 2224 (2015) and Resolution 2231 became the sole operative U.N. Security Council resolution on Iran. Implementation Day was declared on January 16, 2016, after the IAEA made the required certification of Iran's completion of the stipulated tasks.[42]
- **Transition Day.** Represents initial stages of Iran's emergence from U.N. Security Council scrutiny. Transition Day is eight years from Adoption Day—or upon "Broader Conclusion" report from the IAEA Director General to the IAEA Board of Governors and U.N. Security Council—whichever is earlier. As of Transition Day, additional EU entities to be removed from sanctions, the United States is required to remove from designation specified additional Iranian entities subjected to sanctions. The Administration is also required to seek legislative termination of sanctions that were suspended on Implementation Day.
- **UNSCR Termination Day**. Ten years from Adoption Day (on October 18, 2025). Provisions and measures imposed in U.N. Security Council Resolution endorsing JCPOA would terminate and the Security Council would not be

[42] *Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015)*, GOV/INF/2016/1, January 16, 2016. Resolution 2231 also ended the role of the UN panel of experts, which Resolution 1929 had created to work with a committee which monitored states' compliance with the resolutions. Resolution 1737 had established the committee.

involved in the Iran nuclear issue. However, the JCPOA itself does not terminate on this day, and there is no specified termination day for the JCPOA's provisions.

Major Nuclear Provisions of the JCPOA

The JCPOA places constraints on Iran's enrichment and heavy water reactor programs and includes monitoring provisions designed to detect Iranian efforts to produce nuclear weapons using either declared or covert facilities. The nuclear-related provisions of the agreement will, according to the Obama Administration, extend the amount of time that Iran would need to produce enough weapons-grade HEU for one nuclear weapon to a minimum of one year, for a duration of at least 10 years.[43] In addition to the restrictions on activities related to fissile material production, the JCPOA indefinitely prohibits Iranian "activities which could contribute to the design and development of a nuclear explosive device," including research and diagnostic activities. The nuclear provisions agreed in the JCPOA appear to be generally consistent with the nuclear provisions of the April 2 framework accord.

Enrichment Program

The JCPOA sets out specific limitations on Iran's enrichment of uranium for fixed durations. Iran's completion of most of the tasks below was required to be certified by the IAEA in order to qualify for Implementation Day sanctions relief. According to the JCPOA, expiration of the JCPOA enrichment restrictions will be "followed by gradual evolution, at a reasonable pace" of Iran's enrichment program. Iran has submitted an "enrichment R&D plan" to the IAEA as part of Tehran's initial declaration for its Additional Protocol. (See "Verification" section below.) Iranian adherence to that plan is a JCPOA requirement. An IAEA report on January 16, 2016, certified that Iran had met the requirements for Implementation Day stipulated below.[44]

- **Centrifuge Limitation**. Tehran is to use no more than 5,060 IR-1 centrifuges to enrich uranium for 10 years, and to install only IR-1 centrifuges in the facility. All excess centrifuges are to be used only as replacements for operating centrifuges and equipment.
- **Level of Enrichment Limitation**. Iran is to refrain from producing enriched uranium containing more than 3.67% uranium-235 for at least 15 years.
- **Facility Limitation**. For 15 years, Iran is to enrich uranium only at the Natanz commercial facility and is not to build any new enrichment facilities.[45]
- **LEU Stockpile Limitation**. For 15 years, Iran is to maintain its LEU stockpile at no more than 300 kilograms of LEU containing 3.67% uranium-235. Tehran had three options for disposing of the remaining portion of its LEU stockpile: diluting the material so that it contains the same levels of uranium-235 found in natural uranium; selling the LEU to another country; or selling it to an international LEU

[43] "Background Conference Call by Senior Administration Officials on Iran," July 14, 2015. U.S. Secretary of Energy Ernest Moniz described this timeline as "very, very conservative" in an April 2015 interview (Michael Crowley, "Ernest Moniz: Iran Deal Closes Enrichment Loophole," *Politico*, April 7, 2015). British Foreign and Commonwealth Office official Tobias Ellwood echoed this statement in a July 20, 2015, statement to Parliament, explaining that, under the JCPOA provisions, "Iran's breakout period will be over 12 months for 10 years, and is not expected to fall to zero afterwards." (Iran: Nuclear Power: Written question-6891. Answered by Mr. Tobias Ellwood on July 20, 2015.)

[44] GOV/INF/2016/1.

[45] After 10 years, Iran may produce enriched uranium at the pilot centrifuge facility as part of R&D work.

bank recently established by the IAEA.[46] Iran's LEU containing between 5% and 20% uranium-235 is to be "fabricated into fuel plates for the Tehran Research Reactor or transferred, based on a commercial transaction, outside of Iran or diluted" so that it contains a maximum of 3.67% uranium-235. Iran is to export LEU that cannot be fabricated into fuel for the Tehran Research Reactor or dilute that LEU to at most 3.67% uranium-235. On December 28, 2015, Iran shipped out LEU to Russia to reduce its stockpile to the required levels.[47] All fuel plates for the Tehran Research Reactor have been irradiated, according to the January 2016 IAEA report.

- **Fordow Conversion.** Iran agreed to convert its Fordow enrichment facility into "a nuclear, physics, and technology centre" and, for 15 years, to maintain no more than 1,044 IR-1 centrifuges at the facility and to not conduct uranium enrichment or related research and development (R&D) there. The facility will not contain any nuclear material. 348 of the IR-1 centrifuges may be used to produce stable isotopes for medical and industrial uses.[48]
- **Centrifuge Production**. With regard to centrifuge manufacturing, Iran for 10 years is to use the excess IR-1 centrifuges from the Natanz and Fordow facilities "for the replacement of failed or damaged machines." Tehran may resume producing IR-1 centrifuges if its stock of replacement centrifuges "falls to 500 or below." After 8 years, Iran can begin to manufacture two types of advanced centrifuges; after 10 years, Iran can produce complete versions of those centrifuges and store them under IAEA monitoring "until they are needed for final assembly."
- **Centrifuge R&D**. For 10 years, Iran is to refrain from pursuing R&D on any technologies other than gas centrifuge enrichment.

Arak Reactor

The JCPOA commits Iran to redesign and rebuild the Arak reactor based on a design agreed to by the P5+1 so that it will not produce weapons-grade plutonium. Iran is to export the spent fuel from this reactor and all other nuclear reactors. The JCPOA also requires Tehran to render the Arak reactor's original core inoperable; State Department spokesperson John Kirby confirmed on January 14 that Iran had taken this step, and the IAEA report of January 16, 2016, cited above, said Iran had met this requirement. Iran will manage an international project to redesign and construct the replacement reactor; P5+1 participants are to establish a working group "to support and facilitate the redesigning and rebuilding of the reactor." The group is to "conclude an official document" before Implementation Day which would "define the responsibilities" assumed by the P5+1 participants. China's Atomic Energy Authority and the U.S. Department of Energy

[46] Russian Deputy Foreign Minister Sergey Ryabkov stated on August 14 that Iran will export this material to Russia ("The Iran Nuclear Deal: Russia's Interests and Prospects for Implementation," Transcript of a Meeting with Russian Deputy Foreign Minister Sergey Ryabkov, Center for Energy and Security Studies [CENESS], August 14, 2015).

[47] "Press Release on the Export of Enriched Uranium from Iran Assisted by Russia as Part of Preparation for JCPOA Implementation," Ministry of Foreign Affairs of the Russian Federation, December 29, 2015. Daily Press Briefing, Department of State, December 28, 2015." Ambassador Stephen Mull, Coordinator for Implementation of the JCPOA, told the Senate Foreign Relations Committee on December 17, 2015, that the exported material "will end up at a safeguarded facility" in Russia.

[48] Ryabkov stated on August 14 that Russian and Iranian officials had met several times to discuss stable isotope production, adding that the two sides would reach an agreement on the details of such production in "several months" (Ibid.).

"affirmed their readiness to convene and co-chair" the working group, according to an October 18, 2015, joint statement from China, Iran, and the United States, which added that the three parties "intend to work together to conclude expeditiously" the document described above.[49] The parties issued the document on November 22, 2015.

The JCPOA prohibits Iran from reprocessing spent reactor fuel, except to produce "radio-isotopes for medical and peaceful industrial purposes." The JCPOA text states that Iran "does not intend" to engage in reprocessing after the 15-year period expires. Furthermore, Tehran has also committed to refrain from accumulating heavy water "beyond Iran's needs"; Iran is to "sell any remaining heavy water on the international market for 15 years." The JCPOA requires Iran to refrain from building heavy water-moderated reactors for 15 years, and Iran pledges to refrain from constructing any such reactors indefinitely.

Other Provisions

Verification

The IAEA is to monitor Iranian compliance with the JCPOA provisions concerning its enrichment program and the Arak program. To do so, the agency plans to increase its number of inspectors in Iran and use modern verification technologies. Iran has pledged to allow a "long-term IAEA presence in Iran" and "has agreed to implement" the Additional Protocol to its safeguards agreement.[50] Iran is also to implement the modified code 3.1 of the subsidiary arrangements to its IAEA safeguards agreement. It is worth noting that Iran's IAEA safeguards obligations last for an indefinite duration. Potential nuclear-related exports to Iran would remain subject to the Nuclear Suppliers Group's export guidelines.[51]

The JCPOA also describes other monitoring and inspections. For 15 years, the IAEA will monitor the stored Iranian centrifuges and related infrastructure. During this time, Iran will also permit the IAEA "daily access" to "relevant buildings" at the Natanz facilities. For 20 years, Tehran will allow the agency to verify Iran's inventory of certain centrifuge components and the manufacturing facilities for such components. Additionally, Iran is to allow the IAEA to monitor the country's uranium mills for 25 years and to monitor Iran's plant for producing heavy water.[52] IAEA Director-General Yukiya Amano told reporters on July 14, 2015, that the agency's "workload will increase" under the JCPOA. Amano intends to request additional resources from the agency's Board of Governors.[53] On August 25, the Board of Governors authorized Amano "to undertake the verification and monitoring" of Iran's nuclear-related JCPOA commitments "subject to the availability of funds and consistent with our standard safeguards practices."[54] Since then, most of the funding for these activities has come from 31 member states' extra budgetary contributions, according to Amano's February 26 report.[55] As noted, Amano also

[49] "Joint Statement of Intent Concerning the Arak Heavy Water Reactor Research Reactor Modernization Project under the Joint Comprehensive Plan of Action," October 18, 2015.

[50] Article 17 of the Model Additional Protocol says that a state may, before the Protocol enters into force, "declare that it will apply this Protocol provisionally."

[51] For information about the Nuclear Suppliers Group, see CRS Report RL33865, *Arms Control and Nonproliferation: A Catalog of Treaties and Agreements*, by (name redacted), (name redacted), and (name redacted) .

[52] This plant is currently not under IAEA safeguards.

[53] "IAEA Director General Amano's Remarks to the Press on Agreements with Iran," July 14, 2015.

[54] "IAEA Director General Yukiya Amano's Statement to the Board of Governors," September 7, 2015.

[55] GOV/2016/8.

reported on that, since Implementation Day, the IAEA "has been verifying and monitoring the implementation by Iran of its nuclear-related commitments under the JCPOA."[56]

The Obama Administration argues that these provisions will prevent Iran from developing a nuclear weapon covertly. Secretary Kerry explained in a September 2, 2015, speech that Iran "would have to come up with a complete ... and completely secret nuclear supply chain," adding that "our intelligence community and our Energy Department ... both agree Iran could never get away with such a deception."[57]

The JCPOA and UN Security Council Resolution 2231 contain a variety of reporting provisions for the IAEA. For example, the resolution requests the agency's Director General

> to provide regular updates to the IAEA Board of Governors and, as appropriate, in parallel to the Security Council on Iran's implementation of its commitments under the JCPOA and also to report to the IAEA Board of Governors and in parallel to the Security Council at any time if the Director General has reasonable grounds to believe there is an issue of concern directly affecting fulfilment of JCPOA commitments.

Access to Undeclared Sites. The JCPOA also describes arrangements for the IAEA to gain access to Iranian sites other than those Tehran declares to the agency "if the IAEA has concerns regarding undeclared nuclear materials or activities, or activities inconsistent with" the JCPOA. If the IAEA has such concerns at one of these sites, the agency "will provide Iran the basis for such concerns and request clarification." The IAEA could request access to the site if Iran's explanation did not provide sufficient clarification. Tehran may respond to such a request by proposing "alternative means of resolving the IAEA's concerns." If such means did not resolve the IAEA's concerns or the two sides did not "reach satisfactory arrangements ... within 14 days of the IAEA's original request for access," Iran "would resolve the IAEA's concerns through necessary means agreed between Iran and the IAEA." Tehran would make such a decision "in consultation with the members of the Joint Commission" established by the JCPOA.[58] If the two sides cannot not reach agreement, the commission "would advise on the necessary means to resolve the IAEA's concerns" if at least a majority of the commission's members agreed to do so. The Joint Commission would have seven days to reach a decision; "Iran would implement the necessary means within three additional days." (*The total time for the stipulated procedures would be 24 days*.)

The JCPOA contains several provisions apparently designed to address Iranian concerns that IAEA inspectors may try to obtain information unrelated to the country's nuclear program. For example, the IAEA may only request access to the types of facilities described above "for the sole reason to verify the absence of undeclared nuclear materials and activities or activities inconsistent with the JCPOA." In addition, the agency would provide Iran with written "reasons for access" and "make available relevant information."

Procurement Channel. The JCPOA established a "procurement channel" for Iran's nuclear program.[59] The Joint Commission established by the JCPOA is to monitor and approve transfers

[56] Ibid.

[57] "Remarks on Nuclear Agreement With Iran," September 2, 2015. For a detailed explanation, see Richard Nephew, "How the Iran Deal Prevents a Covert Nuclear Weapons Program," *Arms Control Today*, September 2015.

[58] Even in the absence of compliance issues, the commission is to meet every three months. (Ambassador Stephen D. Mull, "Implementation of the Joint Comprehensive Plan of Action," Washington Foreign Press Center, January 21, 2016.)

[59] Information about the channel is available at http://www.un.org/en/sc/2231/pdf/160113-Information-on-the-procurement-channel.pdf.

made via the channel for 10 years. IAEA officials will have access to information about, and may participate in meetings regarding such transfers when they are proposed. According to IAEA officials, "there is additional work to be done in informing exporting countries of their obligations and standardizing the data that the countries would report to IAEA so that they are usable to the agency," a February 2016 GAO report said.[60]

"Broader Conclusion?" The JCPOA also indicates that the IAEA will pursue drawing a "Broader Conclusion that all nuclear material in Iran remains in peaceful activities." According to the IAEA, the agency can draw such a conclusion for states with comprehensive safeguards agreements and additional protocols in force. According to the IAEA,

> The conclusion of the absence of undeclared nuclear material and activities is drawn when the activities performed under an additional protocol have been completed, when relevant questions and inconsistencies have been addressed, and when no indications have been found by the IAEA that, in its judgement, would constitute a safeguards concern.[61]

International Cooperation

The JCPOA discusses a variety of nuclear projects in Iran which would include other countries. These include the Arak reactor project; research at the Fordow facility; other nuclear reactor projects; nuclear medicine; nuclear safety; and the supply of nuclear fuel. This latter form of cooperation is presumably designed to obviate the need for Iran to produce its own nuclear fuel. Some, but not necessarily all, of the P5+1 countries, will participate in these projects. U.S. sanctions laws prohibit the United States from engaging in most forms of nuclear cooperation with Iran. Moreover, the United States does not have a civil nuclear cooperation agreement with Iran, and Section 129b.(1) of the Atomic Energy Act (AEA) of 1954, as amended, forbids the export of "nuclear materials and equipment or sensitive nuclear technology" to any country designated as a state sponsor of terrorism.[62] Section 129b.(3) allows the President to waive this provision. Section 57b.(2) of the AEA allows for limited forms of nuclear cooperation related to the "development or production of any special nuclear material outside of the United States" without a nuclear cooperation agreement if that activity has been authorized by the Secretary of Energy following a determination that it "will not be inimical to the interest of the United States." The JCPOA also envisions forms of technical cooperation between Iran and the IAEA.[63] The Administration argues that international nuclear cooperation will provide additional transparency into Iran's nuclear program.[64]

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[60] *Nuclear Nonproliferation: Preliminary Observations on IAEA's Role in Verifying the Iran Agreement*, United States Government Accountability Office, GAO-16-417, February 2016.

[61] *2001 IAEA Safeguards Glossary*.

[62] Section 129b. (2) of the AEA states that the prohibitions described in the previous section "shall not apply to exports, reexports, transfers, or retransfers of radiation monitoring technologies, surveillance equipment, seals, cameras, tamper-indication devices, nuclear detectors, monitoring systems, or equipment necessary to safely store, transport, or remove hazardous materials ... except to the extent that such technologies, equipment, seals, cameras, devices, detectors, or systems are available for use in the design or construction of nuclear reactors or nuclear weapons." For more information, see CRS Report RS22937, *Nuclear Cooperation with Other Countries: A Primer*, by (name redacted) and (name redacted) .

[63] Implementing a provision of UN Security Council resolution 1737, the IAEA halted some technical cooperation with Iran in 2007.

[64] "Background Conference Call by Senior Administration Officials on Iran," July 14, 2015.

Nuclear Weapons Research and Development

In addition to addressing Iran's ability to produce fissile material, the JCPOA contains other provisions intended to render Iran unable to produce a nuclear weapon. For example, the agreement indefinitely prohibits specific activities "which could contribute to the design and development of a nuclear explosive device."[65] Neither Iran's comprehensive safeguards agreement nor its additional protocol explicitly prohibit these activities. As noted, the U.S. government assesses that Tehran has not mastered all of the necessary technologies for building a nuclear weapon. In addition, for 15 years Iran is to refrain from "producing or acquiring plutonium or uranium metals or their alloys" and "conducting R&D on plutonium or uranium (or their alloys) metallurgy, or casting, forming, or machining plutonium or uranium metal." Producing uranium or plutonium metals is a key step in producing nuclear weapons.

Resolving Questions of Past Nuclear Weapons-Related Research

Regarding the outstanding issues in the IAEA's investigation of Iran's nuclear program, the JCPOA states that Tehran will "complete" a series of steps set out in an Iran-IAEA "Roadmap for Clarification of Past and Present Outstanding Issues." According to IAEA reports, the agency has evidence that Iran may have conducted work relevant to nuclear weapons, such as research about a nuclear payload for missiles. U.N. Security Council resolutions require Iran to resolve these questions by providing full information to the IAEA, and the agency has held regular talks with Iran to chart a path forward. But past reports from Amano to the agency's Board of Governors said that, although the IAEA could verify that there was no diversion of nuclear material from Iran's declared nuclear facilities, it could not conclude that no nuclear weapons-related activity was taking place in the country.

According to Amano, this road map set out "a process, under the November 2013 Framework for Cooperation, to enable the Agency, with the cooperation of Iran, to make an assessment of issues relating to possible military dimensions to Iran's nuclear programme."[66] The November 2013 framework specified measures to address the outstanding questions. "All the activities contained in the road-map were implemented in accordance with the agreed schedule," according to a December 2 report from Amano.[67]

The road map specified that Amano was to present a report to the IAEA Board of Governors by December 15, 2015, which contains the agency's "final assessment on the resolution" of the aforementioned outstanding issues.[68] On December 2, Amano presented this report, which he had described in a November 26, 2015, statement to the IAEA board as "my final assessment on all

[65] Listed in Annex I of the JCPOA, these activities are designing, developing, acquiring, or using computer models to simulate nuclear explosive devices; designing, developing, fabricating, acquiring, or using multi-point explosive detonation systems suitable for a nuclear explosive device; designing, developing, fabricating, acquiring, or using explosive diagnostic systems(streak cameras, framing cameras and flash x-ray cameras) suitable for the development of a nuclear explosive device; and designing, developing, fabricating, acquiring, or using explosively driven neutron sources or specialized materials for explosively driven neutron sources. Iran may conduct some of these activities for non-nuclear purposes if Tehran receives permission from the Joint Commission established by the JCPOA. Such permitted activities would be "subject to monitoring."

[66] "IAEA Director General Amano's Remarks to the Press on Agreements with Iran," July 14, 2015.

[67] *Final Assessment on Past and Present Outstanding Issues Regarding Iran's Nuclear Programme*, GOV/2015/68, December 2, 2015.

[68] "Road-map for the Clarification of Past and Present Outstanding Issues Regarding Iran's Nuclear Program," July 14, 2015.

past and present outstanding [Iranian nuclear] issues" described in a November 2011 report.[69] The December 2 report indicates that the information provided by Iran did not allow the IAEA to resolve some outstanding issues and also casts doubt on some of the information's accuracy. Nevertheless, the report assesses that "before the end of 2003, an organizational structure was in place in Iran suitable for the coordination of a range of activities relevant to the development of a nuclear explosive device." Iran conducted "a range of activities relevant to the development of a nuclear explosive device ... prior to the end of 2003 as a coordinated effort," the report says, adding that "some [nuclear weapons-related] activities took place after 2003," but "were not part of a coordinated effort." The report concludes that "these activities did not advance beyond feasibility and scientific studies, and the acquisition of certain relevant technical competencies and capabilities" and notes that the IAEA "has no credible indications of activities in Iran relevant to the development of a nuclear explosive device after 2009." Amano told the IAEA board on December 15 that, although "it was not possible for the Agency to reconstruct all the details of activities conducted by Iran in the past, we were able to clarify enough elements to provide an assessment of the whole picture."[70]

"It is up to ... [IAEA] Member States to determine the appropriate response" to the report, Amano observed in a November 11, 2015, speech.[71] The JCPOA states that, following Amano's report, the P5+1 "in their capacity as members of the [IAEA] Board of Governors, will submit a resolution to the Board of Governors for taking necessary action, with a view to closing the issue." The board adopted a resolution on December 15 which notes Iran's cooperation with the road map and "further notes that this closes the Board's consideration" of the "outstanding issues regarding Iran's nuclear programme."[72] After the IAEA has verified that Iran has taken the steps required for Implementation Day to take effect, the board will no longer focus on Iran's compliance with past Security Council resolutions and past issues concerning Iran's safeguards agreement. Instead, the board will "become seized of a separate agenda item covering JCPOA implementation and verification and monitoring in Iran in light of" Security Council Resolution 2231. The resolution requests the Director General to issue quarterly reports to the board regarding Iran's "implementation of its relevant commitments under the JCPOA for the full duration of those commitments." The Director General is also to report to the Board of Governors and the Security Council "at any time if the Director General has reasonable grounds to believe there is an issue of concern" regarding Tehran's compliance with its JCPOA or safeguards obligations. It is worth noting that the IAEA will not be able to draw the "Broader Conclusion that all nuclear material in Iran remains in peaceful activities" without addressing these issues.

According to the road map, Iran stated that it would present, in writing, its "comprehensive assessment to the IAEA" on Amano's report. Iran issued that document on January 7, 2016, which apparently acknowledges Iranian "scientific studies of dual-use technologies" for "peaceful civilian or conventional military uses."[73] But the statement reiterated previous Iranian claims that

[69] GOV/2015/68; *Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council Resolutions in the Islamic Republic of Iran*, Report by the Director General, GOV/2011/65, November 8, 2011.

[70] IAEA Director General Amano's Introductory Statement to the Board of Governors, December 15, 2015.

[71] "IAEA Director General Yukiya Amano's Remarks at the International Institute for Strategic Studies on 11 November 2015."

[72] GOV/2015/72.

[73] *Communication Dated 7 January 2016 Received from the Permanent Mission of the Islamic Republic of Iran to the Agency Regarding the Report of the Director General on the Final Assessment on Past and Present Outstanding Issues Regarding Iran's Nuclear Programme*, INFCIRC/893, January 8, 2016.

the country has done no work on nuclear weapons and that some of the evidence underlying the agency's concerns is inauthentic.

British Foreign and Commonwealth Office official Simon Gass stated on September 9, 2015, that "I do not think that anybody believes that we will get a complete understanding of anything that has ever been done in Iran, which was probably never going to happen, but I think we will get a pretty good sense of what past activities have been undertaken."[74] The significance of resolving these issues for ensuring that Iran's current program is for purely peaceful purposes is unclear. Former IAEA Deputy Director General Olli Heinonen argued during a July 2014 Senate hearing that gaining full understanding of Iran's past suspected nuclear weapons program is important for determining that Iran is not reconstituting that program and also for determining the probability that Iran will use a future centrifuge program to produce nuclear weapons.[75] However, in April 2015, Jofi Joseph, a former Obama Administration official whose portfolio included the Iran nuclear issue, commented:

> Some argue that it will be very difficult to identify future covert Iranian nuclear weapons efforts without a detailed understanding of what happened before. I'm not so sure. It is not clear if the individuals involved with the previous [nuclear weapons program] would be the ones tapped again for a future covert program or whether a clear understanding of their previous actions would help identify future efforts.[76]

Former State Department official Robert Einhorn argued that

> It is sometimes argued that full Iranian disclosure is essential to designing an effective JCPOA monitoring system. But the provisions of an agreement that could be most effective in monitoring small-scale weaponization activities would be more intrusive than any sovereign state would be willing to accept (e.g., keeping close track of all scientists with the necessary expertise, on-site verification of all equipment in the country that could be used in nuclear weapons design and diagnostics). With or without full knowledge of past Iranian activities, it would have been nearly impossible to reach agreement on such intrusive arrangements.[77]

Einhorn also explained that

> the United States already has considerable knowledge of past Iranian nuclear weapons work. And in any event, in calculating how much time it would have to thwart an Iranian breakout, the United States would have to make the conservative assumption that Iran had made substantial headway in weaponization and would not require much time to proceed from the production of fissile material to the fabrication of a weapon. It is unlikely that anything the Iranians might say about past weaponization efforts would affect U.S. planning to stop an Iranian breakout, especially because whatever they said would hardly be taken at face value.[78]

[74] "Oral Evidence: Foreign Policy Developments," HC 381, September 9, 2015.

[75] *Iran: Status of the P-5+1, Panel 2*, Senate Committee on Foreign Relations Hearing, July 29, 2014.

[76] "Jofi Joseph on the Iran Deal," Arms Control Wonk, April 7, 2015. Available at http://lewis.armscontrolwonk.com/archive/7623/jofi-joseph-on-the-iran-deal.

[77] Robert Einhorn, "A Verdict on Iranian Military Nukes Won't Kill the Deal," *The National Interest*, November 30, 2015. November 30, 2015.

[78] Ibid.

Sanctions Relief under the JCPOA

Under the JCPOA, the overwhelming bulk of sanctions relief occurs at Implementation Day—the day when the IAEA certifies that Iran has completed the stipulated core nuclear requirements discussed above. The declaration that Implementation Day was reached on January 16, 2016, immediately put into effect the U.S., E.U., and U.N. sanctions relief below, in accordance with the JCPOA.[79] A comprehensive, detailed explanation of the U.S. sanctions being suspended was published by the Office of Foreign Assets Control (OFAC) on Implementation Day. The guidance can be found at https://www.treasury.gov/resource-center/sanctions/Programs/Documents/implement_guide_jcpoa.pdf.

- The sanctions to be lifted or suspended are mostly those imposed since U.N. Security Council Resolution 1929 was enacted in June 2010.[80] That resolution identified Iran's energy sector as a potential contributor to Iran's "proliferation-sensitive nuclear activities."[81] The U.S. sanctions that have been suspended are primarily those that sanction foreign entities and countries for conducting specified transactions with Iran (so-called "secondary sanctions"). The JCPOA commits the United States to only minor modifications to the direct ban on U.S. trade with Iran (Executive Order 12959 of May 1995) to permit licensing sales to Iran of commercial aircraft, and importation from Iran of Iranian luxury goods such as carpets, caviar, and nuts.[82] The vast bulk of the U.S. trade ban remains in place.
- **Sectors Receiving Sanctions Relief**. The U.S. sanctions relief that took effect on Implementation Day (January 16, 2016) includes lifting or suspension of U.S. sanctions on foreign firms (1) that are involved in Iran's energy sector, including Iran's production of and exportation of oil, or that sell Iran gasoline and energy sector equipment; (2) that conduct transactions with most major Iranian banks; and (3) that are involved in Iran's automobile production sector and trading in the *rial*. The United States revoked the designations made under various Executive Orders of numerous specified Iranian economic entities and personalities (listed in Attachment III of Annex II of the JCPOA), including the National Iranian Oil Company (NIOC), various Iranian banks, and many energy and shipping-related institutions. That step enables foreign companies to resume transactions with these entities without risking being penalized by the United States.
- **U.S. Laws to Be Waived and Executive Orders to Be Terminated**. The suspension of U.S. sanctions as required under the JCPOA necessitated exercising presidential authority to waive sanctions mandated by the core operative provisions: (1) the Iran Sanctions Act (P.L. 104-172 as amended);[83] (2)

[79] http://www.politico.com/story/2015/07/full-text-iran-deal-120080.html.

[80] The exact U.S. sanctions laws whose provisions might be waived are discussed in: CRS Report RS20871, *Iran Sanctions*, by (name redacted) , and CRS Report R43311, *Iran: U.S. Economic Sanctions and the Authority to Lift Restrictions*, by (name redacted) .

[81] The text of the Resolution is at https://www.iaea.org/sites/default/files/unsc_res1929-2010.pdf.

[82] The U.S. importation of these luxury goods was permitted during 2000-2010, under a modification to the Executive Order 12959 that imposed a ban on U.S. trade with Iran.

[83] The provision of the Iran Sanctions Act that triggers sanctions on foreign entities that sell WMD-related technology or "destabilizing numbers and types" of advanced conventional weaponry to Iran are not being suspended under the JCPOA.

Section 1245(d)(1) of the National Defense Authorization Act for FY2012 (P.L. 112-81); (3) the Iran Threat Reduction and Syria Human Rights Act (P.L. 112-158); and (4) the Iran Freedom and Counter-Proliferation Act (Subtitle D of P.L. 112-239). The statutory basis for these sanctions remains unchanged. The U.S. sanctions relief also required termination of the following Executive Orders: 13574, 13590, 13622, 13645, and Sections 5-7 and 15 of Executive Order 13628. These revocations were accomplished through the issuing by President Obama of a new Order on January 16, 2016, that revoked those Orders and sections.[84] The United States also has revoked the designations of entities listed in Attachment III—mainly shipping and energy-related entities, as well as some Iranian banks—thereby ending U.S. sanctions on these entities under various Executive Orders and laws (particularly the Comprehensive Iran Sanctions, Accountability, and Divestment Act (CISADA, P.L. 111-195) that reference such designated entities. On October 18 ("Adoption Day"), the Administration issued provisional waivers of the above cited laws, and the waivers formally took effect on Implementation Day. For more detail, on the Executive Orders and the laws referenced above, see CRS Report RS20871, *Iran Sanctions*, and CRS Report R43311, *Iran: U.S. Economic Sanctions and the Authority to Lift Restrictions*.

- **EU Lifting of Sanctions on Implementation Day.** The EU sanctions lifted on Implementation Day included (1) the EU ban on purchases of oil and gas from Iran; (2) the ban on Iran's use of the SWIFT electronic payments system that enables Iran to move funds from abroad to its Central Bank or its commercial banks; and (3) sanctions on entities listed in Annex II, Attachment 1. This attachment does not include one controversial personality—IRGC-Qods Force Commander Qasem Soleimani. EU nuclear-related sanctions on him are to remain until Transition Day, although he will remain sanctioned under EU decisions on Syria and on terrorism. U.S. sanctions on Soleimani will remain, including secondary sanctions on entities that deal with him.
- **Request for Congress to Lift Sanctions Outright**. The JCPOA requires the U.S. Administration, within eight years ("Transition Day"), to request that Congress lift virtually all of the sanctions that will be suspended under the JCPOA. The JCPOA requires all remaining U.N. sanctions to terminate after 10 years of adoption of the JCPOA.
- **Some U.S. Sanctions to Remain in Place**. The JCPOA does not require the United States to suspend sanctions on Iran's support for terrorism, its human rights abuses, and worldwide arms and WMD-related technology to Iran. The specific Executive Orders and statutory provisions that have not been altered include (1) E.O. 13224 sanctioning terrorism entities (not specific to Iran); (2) the Iran-Iraq Arms Non-Proliferation Act that sanctions foreign firms that sell arms and weapons of mass destruction-related technology to Iran; (3) the Iran-North Korea-Syria Non-Proliferation Act (INKSNA);[85] and (4) the Executive Orders and the provisions of CISADA and the Iran Threat Reduction and Syria Human

[84] Executive Order of January 16, 2016: Revocation of Executive Ord3ers 13574, 13590, 13622 and 13645 with respect to Iran, and Amendment of Executive Order 13628, and Provision of Implementation Authorities for Aspects of Certain Statutory Sanctions. https://www.whitehouse.gov/the-press-office/2016/01/16/executive-order-revocation-of-executive-orders-with-respect-to-Iran.

[85] The JCPOA does commit the United States to terminate sanctions with respect to some entities designated for sanctions under INKSNA.

Rights Act that pertain to human rights or democratic change in Iran. Executive Order 13382 sanctioning proliferation entities also remains in place although, as noted, the JCPOA requires the United States to "de-list" numerous entities that have been sanctioned under that Order.

- The United States has not pledged in the JCPOA to remove or to reconsider Iran's designation as a state sponsor of terrorism and all sanctions triggered by that designation remain in place. That designation triggers numerous U.S. sanctions, including a ban on any U.S. foreign aid to Iran and on U.S. exportation to Iran of controlled goods and services, and a prohibition on U.S. support for international lending to Iran. And, those Iranian entities involved in most forms of proliferation activity and in Iran's foreign policy will remain designated for sanctions under various Executive Orders. These entities include the Islamic Revolutionary Guard Corps (IRGC), the IRGC-Qods Force, various IRGC commanders, and IRGC-affiliated entities.
- **U.N. Sanctions on Arms Sales and Ballistic Missiles to Be Terminated After Several Years.** One issue that arose during final negotiations on the JCPOA was the suspension of U.N. sanctions on Iran's development of nuclear-capable ballistic missiles and on Iran's importation or exportation of conventional weaponry. The April 2 framework accord indicated that these sanctions would remain in place, but the finalized JCPOA provided for the ban on Iran's development of nuclear-capable ballistic missiles to be lifted within eight years and the ban on conventional arms sales to Iran and on Iran's exportation of arms to be lifted within five years.[86] These maximum expiration dates are stipulated in Resolution 2231. Some in Congress have cited Iran's reported ballistic missile tests on October 10 and November 21—the former of which the Administration has confirmed and deemed a violation of Resolution 1929—as calling into question Iran's commitment to full implementation of the JCPOA.[87] The Administration has sought separate U.N. Security Council action on the test(s), while asserting that ballistic missile issues are not discussed specifically in the JCPOA. On January 17, 2016, the Administration sanctioned eleven additional entities under Executive Order 13382 for allegedly providing assistance to Iran's ballistic missile program. As noted, U.S. sanctions on foreign entities that sell arms to Iran will remain in place, as will specific U.N. Security Council Resolutions that prohibit weapons shipments to Lebanon and to Yemen.
- **Ban on Reimposing those Sanctions that are Lifted or Suspended**. The JCPOA requires the parties to the agreement to refrain from reimposing the sanctions that are lifted or suspended, as long as Iran is complying. The agreement states that if U.S. sanctions are reimposed (other than on the grounds of Iranian noncompliance), Iran would not be bound by its nuclear commitments. An Iranian letter to the President of the U.N. Security Council, dated July 20, interprets the provision to bar the reimposition of lifted sanctions under "non-nuclear" justifications such as Iranian support for terrorism or armed factions in the Middle East, or for human rights violations.

[86] http://www.scribd.com/doc/271711382/Iran-Deal-Draft-UNSC-Resolution-as-Uploaded-by-Inner-City-Press.

[87] http://www.kirk.senate.gov/?p=press_release&id=1584.

Automatic Reimposition of Sanctions ("Snap-Back")

The JCPOA (paragraph 36 and 37) contains a mechanism for the "snap back" of U.N. sanctions if Iran does not satisfactorily resolve a compliance dispute. According to the JCPOA, the United States (or any veto-wielding member of the U.N. Security Council) would be able to block a U.N. Security Council resolution that would continue the lifting of U.N. sanctions despite Iran's refusal to resolve the dispute. In that case, "... the provisions of the old U.N. Security Council resolutions would be reimposed, unless the U.N. Security Council decides otherwise." These provisions are included in U.N. Security Council Resolution 2231.[88] The wording implies that the Council has the option to reimpose some, but not all, sanctions that existed prior to the JCPOA. *The total time for this "dispute resolution" mechanism—between the time of the complaint of Iranian noncompliance and the reimposition of U.N. sanctions—is 65 days.*

A related question is whether a reimposition of U.N. sanctions would produce an effect on Iran similar to that observed during 2011-2015. The effectiveness of sanctions depended on the substantial degree of international cooperation with the sanctions regime that has taken place. A wide range of countries depend on energy and other trade with Iran and might be reluctant to resume cooperating with reimposed U.S. sanctions unless Iran commits egregious violations of its commitments. Countries that do not wish to reimpose their sanctions on Iran could argue that, because U.N. Security Council sanctions are lifted, they are no longer bound to cooperate with U.S. sanctions. On the other hand, the Administration asserts that the EU, at the very least, has pledged to fully reimpose EU sanctions on Iran in a full snap-back scenario.

Implications for Iran of the JCPOA Sanctions Relief

The suspension of sanctions is likely have significant implications for Iran's economy, including the following:

- **Crude Oil Exports**. Iran is now able to export crude oil without restriction. Iranian energy officials say they plan to increase exports by about 500,000 barrels per day, up from the 1.1 mbd level of the JPA period, within about six months. Iran reportedly has about 30 million-50 million barrels of oil stored, and therefore available for immediate delivery. However, market conditions (falling prices) might cause Iran to sell less oil than it initially planned.
- **Access to Restricted Foreign Exchange Reserves**. Iran gains access to the approximately $115 billion in foreign exchange assets currency that it has been unable to repatriate to its Central Bank. However, according to Treasury Secretary Jacob Lew in testimony on the JCPOA in late July, about $65 billion of those funds are obligated. About $20 billion is owed to China for infrastructure projects performed in Iran by Chinese firms. About $45 billion is owed to cover non-performing loans made to Iranian energy companies and other Iranian firms. The Department of the Treasury says that only about $56 billion would be available for Iran to repatriate, after these obligations are paid. And, of those funds, Iran might need to keep some of the funds abroad for financial management purposes. The funds consist of some assets deposited before restrictions on the movement of the funds was imposed in February 2013 (Iran Threat Reduction Act), but the bulk of the assets are oil sales proceeds deposited since that restriction went into effect. The funds are held by many banks around

[88] http://www.scribd.com/doc/271711382/Iran-Deal-Draft-UNSC-Resolution-as-Uploaded-by-Inner-City-Press.

the world, and particularly in those of Iran's five remaining oil customers: China, India, South Korea, Japan, and Turkey.[89] Some funds might be held in EU banks as well. Other banks said to hold Iranian foreign exchange funds are, according to a determination of waiver provided to Congress on June 17, 2015, in Oman, Switzerland, and South Africa.[90] Banks in the United Arab Emirates, a major trading partner of Iran, might hold some of the monies as well. The United States did not commit in the JCPOA to release any frozen assets (impounded property, bank accounts and securities totaling up to $3 billion) held by the United States under various Executive Orders to Iran, although a nearly simultaneous (announced January 17, 2016) settlement of a 35 year-old dispute over undelivered military equipment will require about $400 million in a DOD escrow account to be remitted to Iran. An additional $1.3 billion in accrued interest (an amount settled on) will come from the "Judgments Fund" of the Justice Department.

- **Post-Sanctions Economic Growth**. Economists estimate that Iran's economy could grow as much as 7% after sanctions are suspended.[91] Iran's energy sector, automotive production sector, and other industrial sectors are likely to rebound strongly as importation of parts becomes easier to finance. Some assert that Iran will use the additional economic resources generated by the deal to enhance its regional position. The Administration acknowledges Iran might steer some extra funding to regional allies but argues that Iran will use the great bulk of the additional funds to invest in its domestic economy, which has been starved by sanctions for several years.
- **Commercial Aircraft Sales**. Iran is likely to seek to purchase significant quantities of commercial aircraft because of the advanced age of most of the aircraft used by its airlines. The deal commits the United States to license commercial aircraft sales to Iran, including U.S.-made aircraft. If such sales are consummated, U.S.-Iran trade in dollars, which has been highly limited by sanctions for many years, could expand significantly. The importation to the United State of U.S. luxury goods is likely not to boost bilateral trade significantly because of the low-volume and low dollar-figure nature of these imports by U.S. buyers.

Selected Regional Reaction to the JCPOA

The JCPOA could have profound implications for the Middle East, and particularly for Israel and for the states of the Gulf Cooperation Council (GCC: Saudi Arabia, Kuwait, Bahrain, UAE, Qatar, and Oman). The JCPOA's potential to remove the threat of a nuclear-armed Iran could lessen regional tensions might. On the other hand, the sanctions relief of the JCPOA will increase the economic resources available to Iran to promote its interests in the region, including the maintenance in office of Syrian President Bashar Al Assad. These issues are discussed in greater depth in CRS Report R44142, *Iran Nuclear Agreement: Selected Issues for Congress*, coordinated by (name redacted) and (name redacted)

[89] Author conversations with diplomats from East Asia. 2014-15.

[90] Assistant Secretary of State for Legislative Affairs Julia Frifield. Letter to Senator Bob Corker, Chairman Senate Committee on Foreign Relations. June 17, 2015. Enclosure to letter: Department of State. Determination and Certification pursuant to the National Defense Authorization Act of FY2012. Undated.

[91] http://www.businessinsider.com/baml-chart-on-irans-economy-2015-7.

Gulf States

The GCC states have expressed public support for the JCPOA but they state concerns that the sanctions relief component of the deal could lead Iran to expand its regional influence. Some GCC leaders have publicly associated their concerns about the agreement with criticisms of U.S. reticence to act militarily to try to oust Assad, the U.S. pullout of all troops from Iraq in 2011, and U.S. assertions that it will not deploy ground combat troops to battle the Islamic State organization in Iraq or Syria. The GCC leaders assert that Iran is pursuing a sectarian agenda aimed at empowering Shiite Muslims in the region at the expense of Sunnis.

In an apparent attempt to assuage GCC concerns, during in the latter stages of negotiations of the JCPOA, President Obama met with GCC leaders at Camp David during May 13-14, 2015. The meeting resulted in statements of additional U.S. support for the security of the GCC states, and the leaders and deputy leaders who attended the meetings reportedly expressed substantial satisfaction with the results. There reportedly was further discussion of joint U.S.-GCC steps to counter Iran's destabilizing regional activities during a White House meeting on September 4, 2015, between President Obama and Saudi Arabia's King Salman, and further high-level U.S. meetings with Gulf state leaders have discussed these same issues since. The final statement of the December 9-10 GCC summit, an annual event, called on Iran to adhere to the JCPOA an rejected "Iran's interference into the internal affairs of the GCC states and the region."[92] Tensions over the JCPOA might have contributed to Saudi Arabia's execution of a Shiite cleric in early January 2016, an action that precipitated the sacking of the Saudi Embassy in Tehran and the breaking of relations between Saudi Arabia and Iran and Bahrain and Iran, and the downgrading of relations with Iran by the UAE, Kuwait, and Qatar. See also CRS Report RL32048, *Iran: Politics, Gulf Security, and U.S. Policy*, by (name redacted) .

Israel[93]

Israel's leaders routinely assert that their country is uniquely threatened by the possibility of a nuclear-armed Iran, as well as by an Iran that is freed from international sanctions and has additional resources with which to pursue its foreign policy. Israeli Prime Minister Binyamin Netanyahu, including in a speech to a joint session of Congress on March 3, 2015, has repeatedly warned of the alleged perils of a deal that would in any way ease the international sanctions regime against Iran and accept Iran's retention of enriched uranium or of infrastructure potentially usable for the generation of fissile material. Netanyahu stated, the day the JCPOA was announced, that the deal is a "historic mistake" and that Israel would "not be bound" by the accord. His critical view of the deal, restated in his October 2, 2015, speech to the U.N. General Assembly, is widely shared across the Israeli political spectrum. The reportedly ongoing U.S.-Israel consultations on aid and arms sales appear to reflect a shift by Israeli officials away from opposing the nuclear deal, and toward insisting on its enforcement. During Prime Minister Netanyahu's November 2015 visit to the United States, he said:

> I think that what is important is not merely President Obama's commitment to bolstering Israel's security for the next ten years, but also his commitment to maintain Israel's qualitative military edge so that Israel can defend itself by itself against any threat. That is the most important commitment. And despite our disagreement over the nuclear deal with Iran, I believe that America and Israel can and should work together now to ensure

[92] http://www.bna.bh/portal/en/news/700828.

[93] This section was prepared by (name redacted), Specialist in Middle Eastern Affairs (tel.., on October 5, 2015. For more information, see CRS Report RL33476, *Israel: Background and U.S. Relations*, by (name re dacted)

> Iran complies with the deal, to curb Iran's regional aggression and to fight Iranian terrorism around the world.[94]

In connection with Implementation Day, Prime Minister Netanyahu said that Israel would strengthen its defenses, increase its intelligence resources, and "warn of any violation" of the agreement, while urging the United States and the other members of the United Nations Security Council to reimpose harsh sanctions on Iran if it violated the deal.[95]

However, some former officials from Israel's security establishment have publicly asserted that the deal has positive aspects, with some of them voicing concerns about possible damage that continued Israeli opposition to the deal might do to U.S.-Israel relations. With the deadline for Congress to pass a resolution of disapproval of the deal having expired in September 2015, some Israeli military leaders have reportedly urged Netanyahu "to begin working on a joint U.S.-Israeli strategy based on the deal's premise that Iran's nuclear program will indeed be frozen for 15 years."[96]

In its ultimately successful effort to avoid a congressional resolution of disapproval, the Obama Administration sent letters to several Members of Congress stipulating ongoing or planned steps to help Israel defend itself and counter Iran's regional influence.[97] Israel and the United States have reportedly begun preliminary consultations on an aid and arms sales package to assuage Israeli concerns regarding the deal and address requirements to uphold Israel's "qualitative military edge" with respect to recent and proposed U.S. arms sales to various Gulf Arab states.[98]

Implications for U.S.-Iran Relations[99]

There has been debate over whether the JCPOA will alter the broader U.S.-Iran relationship. Iran and the United States have been mostly at odds since the February 1979 Islamic revolution, and came into limited naval conflict during the 1980-1988 Iran-Iraq War. In 1984, the United States placed Iran on its list of "state sponsors of terrorism" and has accused Iran of numerous acts of terrorism against the United States and its interests. However, the JCPOA contains no provisions on this or other bilateral U.S.-Iran issues. Iran continues to aid a wide range of groups in the Middle East, such as Hezbollah and Hamas, which are labeled Foreign Terrorist Organizations by the United States. Iran arms and trains Shiite militias operating in Iraq that are fighting the Islamic State but have also widened Sunni-Shiite sectarian rifts there. Iran also is a key supporter of President Bashar Al Assad of Syria, who the United States says cannot be part of a permanent political solution for the Syria conflict.

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[94] Israeli Prime Minister's Office, PM Netanyahu's Address to the Jewish Federations of North America General Assembly, November 10, 2015.

[95] See http://www.nytimes.com/2016/01/18/world/middleeast/netanyahu-asserts-israel-will-be-irans-watchdog.html.

[96] http://www.realclearpolitics.com/articles/2015/09/04/netanyahus_next_step_127989.html.

[97] http://www.nytimes.com/interactive/2015/08/20/world/middleeast/document-obamas-letter-to-congressman-nadler.html?_r=1.

[98] The sources for this paragraph are Amos Harel, "Washington, Jerusalem discussing massive compensation for Iranian nuclear deal," haaretz.com, May 20, 2015; and Leslie Susser, "The Challenge: Getting the US Back in Israel's Corner," Jerusalem Report, May 18, 2015. On May 19, 2015, the Defense Security Cooperation Agency published a notification of a proposed U.S. sale to Israel of $1.879 billion worth of munitions and associated parts; and http://www.al-monitor.com/pulse/originals/2015/09/us-offer-anti-iran-bomb-israel.html#ixzz3mTwMXRzK.

[99] For detail on U.S.-Iran relations and Iranian policy in the Middle East, see CRS Report R44017, *Iran's Foreign Policy*, by (name redacted) , and CRS Report RL32048, *Iran: Politics, Gulf Security, and U.S. Policy*, by (name re dacted) .

Still, the prospects for the JCPOA to set a new course in U.S.-Iran relations appeared to dim somewhat in the run-up to Implementation Day. In October 2015, Iran convicted U.S.-Iranian journalist Jason Rezaian and detained another dual national (Siamak Namazi).[100] As noted above, Iran conducted at least one ballistic missile test that the United States called a violation of U.N. Security Council Resolutions 1929 and vowed to continue to develop its missile program to preserve its national security. Iran also is widely reported to have cooperated with Russia's military intervention in Syria, perhaps even taking the lead in urging that intervention.

However, prospects for the JCPOA to produce an improved relationship turned again in connection with Implementation Day. In mid-January 2016, the United States and Iran quickly resolved the Iranian capture of ten U.S. sailors who had strayed into Iranian territorial waters in the Persian Gulf, near Farsi Island, and were taken into custody by the IRGC Navy. It was revealed on Implementation Day that separate negotiations had produced a mutual release of prisoners, under which four Iranian-American nationals were released, the three most notable of which were Washington Post reporter Jason Rezaian, pastor Saeed Abedini, and former U.S. marine Amir Hekmati. A fifth person, a U.S. student was also released by Iran separately. In exchange, the United States granted clemency to seven Iranian-Americans and Iranians who were convicted of violating U.S. laws by providing or attempting to provide weapons or WMD technology to Iran. The United States also dropped charges against 14 persons accused of similar violations, and announced the settlement of the long-standing dispute (arbitrated for 35 years at the U.S.-Iran Claims Tribunal in the Hague) over military equipment the Shah paid for but the U.S. impounded after his government fell to the Islamic revolution. The United States will pay Iran the $400 million in a DOD escrow account plus $1.3 billion in accrued interest. In a statement on January 17, 2016, President Obama cited the recent developments as evidence of the benefits of U.S.-Iran diplomacy and said:

> Following the nuclear deal, you – especially young Iranians – have the opportunity to begin building new ties with the world. We have a rare chance to pursue a new path – a different, better future that delivers progress for both our peoples and the wider world. That's the opportunity before the Iranian people. We need to take advantage of that.[101]

Neither President Obama nor any other U.S. official indicated in connection with Implementation Day that any restoration of formal diplomatic relations is under discussion. However, many observers say that the Administration sees the sanctions relief as potentially helping Rouhani allies in upcoming Iranian parliamentary elections (February 26, 2016). A big victory by moderate candidates, if they are allowed by the clerics to run in the election, could potentially strengthen a bid by Rouhani, should he decide to do so, to pursue a broader reconciliation with the United States.

Critics of the Administration policy on Iran argued that the U.S. release of convicted sanctions violators was inappropriate in that the U.S.-Iranian persons held by Iran were held for no justifiable reason. They also argued that the U.S. release could encourage Iran to take additional dual nationals into custody in hopes of purportedly trading them for future U.S. concessions.

Iran's Supreme Leader Ayatollah Ali Khamene'i, who reportedly is concerned that the nuclear deal could increase U.S. cultural, political, social, and economic influence in Iran, has asserted several times that the JCPOA will not be accompanied by a breakthrough in U.S.-Iran relations or

[100] Iran holds at least four U.S.-Iran nationals, and a fifth, Robert Levinson, has been missing since a visit to Iranian territory in 2007. He is believed alive but Tehran denies holding him or having knowledge of where he is held or by whom.

[101] White House. Statement by the President on Iran. January 17, 2016.

any change in Iran's regional policies. However, in his speech to the U.N. General Assembly on September 29, 2015, President Rouhani expressed the hope that the JCPOA would lead to Iran's expanding relations with "various countries"—a formulation widely understood to refer to the United States. President Obama has stated that he hopes that a finalized deal "ushers in a new era in U.S.-Iran relations."[102] In appearances in Iran connected to Implementation Day, Rouhani generally touted the benefits of sanctions relief and downplayed the prisoner exchanges or any broader rapprochement with the United States.

Another hindrance to any post-JCPOA U.S.-Iran rapprochement is remaining U.S. sanctions and issues unrelated to nuclear issues. U.S. officials have stressed that no sanctions that address long-standing U.S. concerns about Iran's use of terrorism or its human rights abuses will be eased as part of a nuclear deal with Iran. U.S. officials also maintain that a nuclear deal will not cause the United States to cease its public criticism of Iran's human rights practices and its detention of U.S. citizens.

Formal Congressional Review and Oversight

Legislation providing for congressional review was enacted as the Iran Nuclear Agreement Review Act of 2015 (INARA, P.L. 114-17).[103] Because the agreement was reached after July 10, the congressional review period was 60 days from the date of submission to Congress, which is to be within five days of finalization of the accord. The transmission of all required materials, according to the Administration, took place on July 19, 2015. No statutory sanctions could be waived during the review period which, according to the stipulated timetable, is to conclude on September 17. If a congressional resolution of disapproval were passed by both chambers, President Obama could not waive sanctions for another 12 days, during which he would presumably exercise his threat, stated on July 14, to veto a resolution of disapproval. Congress would then have 10 days to try to override the veto, during which sanctions could not be waived. So, the maximum period during which statutory sanctions could not be waived was 82 days after receipt of the agreement. The JCPOA did not provide for any sanctions relief earlier than 90 days from the July 20, 2015, adoption of U.N. Security Council Resolution 2231, which was calculated as October 18 (Adoption Day).

Joint resolutions of disapproval were introduced in each chamber: H.J.Res. 64 in the House, and S.Amdt. 2640 to H.J.Res. 61 in the Senate. However, the House acted on three bills: H.R. 3461 to *approve* the deal was voted down 162-269. Another bill, H.Res. 411, asserting that the President did not comply with P.L. 114-17 because the IAEA-Iran agreements were not submitted to Congress, passed the House 245-186. A third bill, H.R. 3460, denying the President the ability to waive any sanctions laws until January 2017, passed 247-186. None of the bills was taken up by the Senate. In that body, several cloture motions on the disapproval resolution (H.J.Res. 61) were defeated and the review process under P.L. 114-17 ended on September 17, 2015, with no resolution either approving or disapproving the JCPOA having passed both chambers.

Iranian leaders debated how they would formally review the accord. Supreme Leader Khamene'i stipulated that the Iranian Majles (parliament) should formally review the agreement, without stating clearly his own position on the JCPOA. President Rouhani reportedly sought to skirt a formal parliamentary vote, apparently concerned about hardliner reaction, instead suggesting that a review by the Supreme National Security Council (SNSC) would suffice. In August 2015, the

[102] Roger Cohen. "U.S. Embassy, Tehran." *New York Times*, op-ed. April 8, 2015.

[103] For greater detail on all the provisions of that law, see CRS Report RS20871, *Iran Sanctions*, by (name redacted) .

Majles set up a 15-person committee to review the JCPOA. The committee issued its findings on October 4, 2015, finding "flaws" in the agreement but stopping well short of saying it should not be adopted.[104] Acting just before the deadline for Adoption Day, the *Majles* formally voted to approve the agreement, and the law doing so was subsequently accepted in review by the Council of Guardians. On October 21, 2015, Supreme Leader Khamene'i issued a letter to Rouhani formally accepting the *Majles* and Council of Guardians decisions, while stressing stipulations, reservations, and distrust of the U.S. intent to fully implement U.S. commitments under the JCPOA.[105] Some of his stipulations were also reflected in the Majles law that accepted the JCPOA. However, most experts assess that the Iranian statements of reservation reflected the long-standing distrust between the United States and Iran and would not affect Iran's implementation of the agreement.

Ongoing Oversight under INARA

INARA provides for Administration reporting to Congress under several scenarios and at differing intervals:

- **Material Breach Report**. INARA requires that the President report to Congress any information relating to a potentially significant Iranian breach of the JCPOA, within 10 days of receiving information on such a possible breach. Within 30 calendar days after submitting such a report, the Administration is to make a determination whether there has been a material breach of the JCPOA by Iran.
- **Compliance Certification**. Under INARA, The Administration is required to certify, within 90 days or less of the end of the INARA congressional review period (first report by December 16, 2015), and each 90 days thereafter, that Iran is fulfilling its commitments under the JCPOA. If the President does not make the required certification of Iranian compliance, or reports a material breach by Iran, Congress "may" initiate within 60 days "expedited consideration" of legislation that would reimpose any Iran sanctions that the President had suspended through use of waiver or other authority. As is any legislation, such "snap back" sanctions legislation would be subject to potential presidential veto.
- Semi-Annual Report. INARA requires an Administration report every 180 days after the finalization of the JCPOA on July 14, 2015, on Iran's nuclear program and Iran's compliance with the agreement during the period covered in the report. The report is to include not only Iran's compliance with its nuclear commitments but also whether Iranian banks are involved in terrorism financing; Iran's ballistic missile advances; and whether Iran continues to support terrorism. (First report is due by March 12, 2016.)

Ongoing Implementation of the JCPOA and Further Legislation

The Administration and the IAEA have said that Implementation Day is the start of the longterm process of ensuring that Iran complies with its commitments. On September 17, 2015, Secretary Kerry announced the appointment of Ambassador Stephen Mull as Lead Coordinator for Iran Nuclear Implementation, stating that Mull is to "lead the interagency effort to ensure that the nuclear steps Iran committed to in the JCPOA are fully implemented and verified, and that we

[104] http://news.yahoo.com/iran-nuclear-review-panel-says-deal-flawed-103101551.html.

[105] Open Source Center. "Leader Issues Important Order to Ruhani on JCPOA." October 21, 2015.

and our partners are taking reciprocal action on sanctions." Mull reports directly to Kerry and Deputy Secretary of State Anthony Blinken. "Interagency coordination will involve the Departments of State, Treasury, Energy, Homeland Security, Commerce, Justice, and Defense, as well as others in the intelligence and law enforcement communities," Kerry explained.[106] IAEA Director Amano issued an Implementation Day statement that Implementation Day "paves the way for the IAEA to begin verifying and monitoring Iran's nuclear-related commitments under the agreement, as requested

Some post-congressional review legislation, introduced or reported to be under discussion, is asserted to redress the purported weaknesses of the agreement or address Iran-related issues that were not part of the JCPOA negotiations process. Critics of some or all of the proposed or possible legislation assert that some provisions would be interpreted by Iran as a violation of the letter or spirit of the JCPOA and would cause the agreement to fail. The bills include

- The Iran Policy Oversight Act (S. 2119). The bill contains a number of provisions, including adding certification requirements in order for the Administration to remove designations of Iranian entities sanctioned for proliferation or terrorism-related activities.
- The IRGC Terrorist Designation Act (H.R. 3646 and S. 2094). Requires a report on whether the IRGC meets the criteria for designation as a Foreign Terrorist Organization (FTO). Administration argues that the law that set up the FTO designations (Section 219 of the Immigration and Nationality Act [8 U.S.C. 1189]) applies such designations to groups, rather than duly constituted armed forces of a nation-state (which the IRGC is).
- Authorization of Use of Force against Iran Resolution (H.J.Res. 65 and H.J.Res. 62). The bills would authorize the President to "use the Armed Forces of the United States" if Iran violates the JCPOA or to achieve the goal of preventing Iran from obtaining nuclear weapons. The Administration argues that it has already articulated that "all options remain on the table" should Iran violate the JCPOA or seek to acquire a nuclear weapon after the JCPOA restrictions expire. A formal use of force authorization could, officials argue, run counter to the spirit of diplomatic resolution encapsulated in the JCPOA.
- Prohibiting Assistance to Nuclear Iran Act (H.R. 3273). The bill would prohibit the use of U.S. funds to provide technical assistance to Iran's nuclear program. Some might argue that the provision, if enacted, could cause budgetary difficulties for the IAEA in its attempts to monitor the implementation of the JCPOA.
- The Justice for Victims of Iranian Terrorism Act (H.R. 3457, S. 2086). The bill would prohibit the President from waiving U.S. sanctions in accordance with the JCPOA until Iran has completed paying judgments issued for victims of Iranian or Iran-backed acts of terrorism. House bill passed the House on October 1, 2015, by a vote of 251-173. Administration officials argue that this bill, if enacted, would impose additional requirements for sanctions relief that are not agreed in the JCPOA, and would likely therefore cause Iran to abrogate the deal.[107]

[106] "Secretary of State John Kerry Appointment of Ambassador Stephen D. Mull as Lead Coordinator for Iran Nuclear Implementation," September 17, 2015.

[107] For more information on the issue of judgments for victims of Iranian terrorism, see CRS Legal Sidebar WSLG1358, *Terrorism Victims Sue to Enjoin Sanctions Relief under the Iran Nuclear Agreement*, by (name redacted) , (continued...)

- H.R. 3728 would amend the Iran Threat Reduction and Syria Human Rights Act to impose mandatory (rather than voluntary) sanctions on allowing Iran's Central Bank and other sanctioned Iranian banks to use electronic bank transfer systems such as the Brussels-based SWIFT system. Iran would undoubtedly view imposition of that sanction as a violation of the JCPOA.
- The Iran Terror Finance Transparency Act (H.R. 3662). The bill would add certification requirements for the Administration to remove sanctioned Iranian entities from U.S. lists of Specially Designated Nationals and Blocked Persons. The bill was voted on and passed on January 13, 2016, but the vote was vacated by the House leadership and might be held again in late January.

(...continued)

and CRS Report RL31258, *Suits Against Terrorist States by Victims of Terrorism*, by (name redacted) .

Appendix A. Chart on the JCPOA[108]

Table A-1. Summary of Timeline

IMPLEMENTATION	COMPONENTS	DATE/EXPECTED
Finalization Day	• Date on which JCPOA announced. • Joint Commission established comprised of representatives of Iran and the P5+1, with the EU High Representative. • Coordination led by EU High Representative. • Meet on quarterly basis or at request of any JCPOA participant. • Decision and work subject to U.N. rules of confidentiality. • Among other things, in charge of dispute resolution and establishing procurement channel.	July 14, 2015
JCPOA submitted to U.N. Security Council	• P5+1 will "promptly" send JCPOA to U.N. Security Council (UNSC) for review and adoption "without delay."	Resolution 2231 submitted on July 15 and adopted on Monday, July 20, 2015
Adoption Day	• 90 days (or earlier if agreed by P5+1 and Iran) after endorsement of JCPOA by the UNSC. From this date, participants start making preparations for implementing commitments. • EU to adopt regulation terminating nuclear-related sanctions with effect from Implementation Day. • U.S. President to issue sanctions waivers to take effect on Implementation Day. • Iran to prepare nuclear related commitments and notify IAEA that it will apply Additional Protocol provisionally with effect from Implementation Day.	October 18, 2015
Implementation Day	• Simultaneously with IAEA report verifying implementation by Iran of the nuclear-related measures, U.N. sanctions terminate, EU sanctions terminate (in some cases only suspended), U.S. "ceases" application of nuclear related sanctions.	Not tied to any date, but expected to occur within 4-6 months from Adoption Day. Roughly in the first half of 2016. Occurred on January 16, 2016
Transition Day	• 8 years after Adoption Day or the date when IAEA submits a report that all nuclear material in Iran remains in peaceful activities (whichever is earlier). EU terminates remaining sanctions. U.S. terminates or modifies remaining sanctions. Iran ratifies Additional Protocol.	Expected mid-October 2023
U.N. Security Council Resolution Termination Day	• 10 years from Adoption Day, the UNSC resolution endorsing JCPOA terminates—provided no U.N. sanctions have been reimposed. UNSC "would no longer be seized of the Iran nuclear issue."	Expected mid-October 2025

[108] Appendix prepared by Christopher Mann, Research Assistant, CRS; adapted from European Council on Foreign Relations.

Table A-2. JCPOA Commitments

COMMITMENTS	COMPONENTS	TIMEFRAME
U.N. Security Council Resolution endorsing the JCPOA	• U.S. Congress will be faced with a UNSC Resolution endorsing JCPOA before casting votes on the deal	Resolution 2231 adopted on July 20, 2015. Comes into force within 90 days.
Nuclear-Related: to be Carried Out by Iran		
Iran-IAEA Roadmap on Possible Military Dimension (PMD)	• Pursuant to Roadmap agreed between Iran and IAEA on 20 July 2015 (confidential document). • Iran will provide IAEA explanation on outstanding issues. • There will be technical and political meetings. • Arrangements in place regarding the issue of Parchin (there has been previous access to this military site). • All steps in Roadmap must be fulfilled before Implementation date.	Iran submits written answers by August 15, 2015. IAEA has one-month review. IAEA resolves remaining PMD issues/questions by October 15, 2015. IAEA presents report on PMD by December 15, 2015.
Enrichment only at Natanz—preventing "uranium path to weaponization"	• For 10 years: centrifuges reduced to 5,060 IR-1. Excess centrifuges stored under IAEA monitoring. • For 15 years: level of uranium enrichment capped at 3.67%. • For 15 years: Natanz is Iran's only enrichment facility. • Between years 11-15: Iran can replace IR-1 centrifuges at Natanz with more advanced ones.	Implementation Day
Enriched Uranium Stockpile—preventing "uranium path to weaponization"	• For 15 years: stockpile kept under 300 kg up to 3.67% enriched uranium hexafluoride (UF6) or the equivalent in other chemical forms (this is a 98% reduction from existing stockpiles). • Excess sold based on international prices. • Uranium oxide enriched 5-20% fabricated into fuel for Tehran Research Reactor.	Implementation Day
Fordow—"uranium path to weaponization"	• Converted to research facility. • No more enrichment or R&D at this facility. • 1,044 IR-1 centrifuges in six cascades will remain here, but cannot enrich uranium.	Implementation Day
Research & Development	• For 10 years: R&D with uranium will only include IR-4, IR-5, IR-6 and IR-8 centrifuges. • After 8 years: Iran starts manufacturing agreed numbers of IR-6 and IR-8 centrifuges without rotors. • After 10 years: begin phasing out IR-1 centrifuges. • Manufacture advanced centrifuge machines only for the purposes specified with P5+1.	Implementation Day

COMMITMENTS	COMPONENTS	TIMEFRAME
Arak Heavy Water Reactor—preventing "plutonium path to weaponization"	• Iran will redesign and rebuild reactor into lower power research reactor with P5+1 partnership. • Iran would take out the original core of the reactor; this will become unusable. • Permanent: Iran will not produce weapons grade plutonium. • For 15 years: no heavy water reactors in Iran. • Permanent: Iran ships out all spent fuel from Arak reactor.	Implementation Day Before Implementation date, Iran and P5+1 agree on joint venture.
Transparency—preventing "covert path to weaponization"	• By October 15, 2015: Iran clears up questions about its alleged past research on nuclear weapons (Possible Military Dimensions, or PMD) • Permanently: Additional Protocol measures—Iran will provisionally apply this and eventually its parliament will ratify it. • Permanently: full implementation of modified Code 3.1 of the Subsidiary Arrangements to its Safeguards Agreement. • For 20-25 years: IAEA has access to Iran's supply chain for its nuclear program and has continuous surveillance of centrifuge manufacturing and storage facilities. • Procurement channel created for Iran's purchase of nuclear related equipment and material.	Implementation Day PMD measures by October 15, 2015.
Access	• Requests for access to suspect sites will be made in good faith by IAEA. Not aimed at interfering with Iranian military/national security activities. • IAEA provides Iran reasons for concerns regarding undeclared nuclear materials or activities and request access to those locations. • Iran may propose to the IAEA alternative means of resolving the IAEA's concerns. • If cannot agree within 14 days of original IAEA request, the Joint Commission will adjudicate and if needed decision made by majority vote. • Consultation with, and voting by Joint Commission must happen within 7 days. • Iran would implement decision within 3 days (total of 24 days after original IAEA request).	Implementation Day
Sanctions Relief to be Carried Out by P5+1		
U.N.	• UNSCR Resolution 2231endorsing JCPOA goes into effect to terminate all previous resolutions targeting Iran's nuclear program—1696 (2006), 1737 (2006), 1747 (2007), 1803 (2008), 1835 (2008), 1929 (2010), and 2224 (2015). • Subject to snap-back under dispute resolution process (Preamble to agreement, paragraphs 36 and 37) • 15 days for review by the Joint Commission to assess the dispute. Time for review can be extended by mutual consent. • If unresolved, 15 days for review by Ministers of Foreign Affairs. Any participant could refer the issue to the Ministers. Time for review can be extended by mutual consent. • If unresolved, 15 days for review by Advisory Board (three	Implementation Day

COMMITMENTS	COMPONENTS	TIMEFRAME
	members, one each appointed by the participants in the dispute and a third independent member). Will provide nonbinding decision. • Joint Commission has 5 days to review decision of Advisory Board. If no resolution and complaining party sees action as "significant non-performance"—unresolved issue can be treated as grounds to cease performing commitments in whole or part. Complaining party will notify UNSC. • UNSC will then vote on a resolution as to continuing lifting of sanctions. If resolution not adopted by 30 days, old UNSC resolution sanctions snap-back. China and Russia cannot veto. Iran will cease to perform its obligations if sanctions snap back. • Sanctions snap-back not applicable with retroactive effect to contracts signed between any party and Iran. • After 5 years: U.N. sanctions on conventional weapons that were linked to Iran's nuclear activities terminate. • After 8 years: U.N. sanctions on Iran's missile program that were linked to Iran's nuclear activities terminate. • U.S. and international sanctions on Iran's conventional weapons and missile capabilities remain.	
USA	• Under easing of U.S. and EU sanctions, Iran will be allowed access to roughly $100 billion revenues frozen abroad in a special escrow. • Cease the application of economic sanctions against Iran's oil and banking sector allowing Iranian banks and companies to reconnect with international systems (see CRS Report RS20871, *Iran Sanctions*). • Will remove designation of certain entities and individuals (Attachment III). • Allows for licensed non-U.S. persons that are owned or controlled by a U.S. person to engage in activities with Iran permitted under JCPOA. • Allows for the sale of commercial passenger aircraft to Iran. • Allows for license for importing Iranian-origin carpets and foodstuffs into U.S. • U.S. takes appropriate measures to address laws at state or local level preventing full implementation of JCPOA—U.S. will actively encourage officials to adhere to JCPOA policy. • 8 years after Adoption date—if IAEA concludes that all nuclear activity in Iran remains peaceful—U.S. will seek legislative action to terminate/modify nuclear related sanctions. • U.S. sanctions on Iran targeting human rights, terrorism, and missile activities remain.	Implementation Day

COMMITMENTS	COMPONENTS	TIMEFRAME
EU	• Terminate all provisions of the EU Regulation related to Iran's nuclear program. • Includes: financial and banking transactions; transactions in Iranian Rial; provision of U.S. banknotes to Iranian government; access to SWIFT; insurance services; efforts to reduce Iran's crude oil and petrochemical product sales; investment; transactions with Iran's energy and shipping sector; trade in gold and other precious metals; trade with Iran's automotive sector. • Removes individuals and entities designated under sanctions (Attachment 1) • EU refrains from reintroducing sanctions terminated under JCPOA (Iran views any reintroduction as grounds to cease performing its commitments). • Refrain from policy intended to adversely affect normalization of economic relations with Iran. • For 8 years after Implementation date: EU's arms embargo and restrictions on transfer of ballistic missiles remain.	Implementation Day
Congressional Review	• 60 days: Vote to approve or disapprove agreement. • 12 days: President has 12 days to veto. • 10 Days: Congress has 10 days to override presidential veto. • Every 90 days after the review period, the Administration is required to certify Iran is fully complying with the agreement. If such certification is not made, Congress has the opportunity to enact a resolution snapping back U.S. statutory U.S. sanctions.	Thursday, September 17, 2015: congressional approval/disapproval deadline. Tuesday, September 29, 2015: deadline for presidential veto. Friday, October 9, 2015: congressional deadline for overriding presidential veto.

Appendix B. Nuclear Weapons Development[109]

An effective nuclear weapons capability has three major elements: producing fissile material in sufficient quantity and quality for a nuclear explosive device; designing and weaponizing a survivable nuclear warhead; and producing an effective means for delivering the weapon, such as a ballistic missile.[110] The U.S. government assesses that, although Iran could eventually produce nuclear weapons, it has not yet decided to do so and has not mastered all of the necessary technologies for building a nuclear weapon. Tehran had a nuclear weapons program but halted it in 2003, according to U.S. government estimates.[111]

Under Secretary of State for Political Affairs Wendy Sherman explained during an October 3, 2013, Senate Foreign Relations Committee hearing that Iran would need as much as one year to produce a nuclear weapon if the government made the decision to do so.[112] This estimate takes into account the amount of time that Iran would need to produce a sufficient amount of weapons-grade highly enriched uranium (HEU), which is widely regarded as the most difficult task in building nuclear weapons, as well as to develop the other components necessary for a nuclear weapon. This estimate does not include the time that Iran would need to be able to render a nuclear weapon deliverable by a ballistic missile. Then-Secretary of Defense Leon Panetta stated in January 2012 that Iran would need "possibly ... one to two years in order to put [a nuclear weapon] on a deliverable vehicle of some sort."[113]

A senior intelligence official explained during a December 2007 press briefing that the "acquisition of fissile material" was the "governing element in any timelines" regarding Iran's production of a "nuclear device."[114] However, the estimate articulated by Sherman assumes that Iran would need two to three months to produce enough weapons-grade HEU for a nuclear weapon.[115] This estimate also apparently assumes that Iran would use its declared nuclear facilities to produce fissile material for a weapon.[116] The other assumptions behind the estimate are not clear.[117]

Tehran would probably use covert enrichment facilities to produce fissile material for nuclear weapons—a tactic that would require a longer period of time, according to testimony from

[109] For more information about Iran's ballistic missile program, see CRS Report R42849, *Iran's Ballistic Missile and Space Launch Programs*, by (name redacted) .

[110] For a more detailed discussion, see Office of Technology Assessment, *Technologies Underlying Weapons of Mass Destruction* (OTA-BP-ISC-115), December 1993.

[111] A 2007 National Intelligence Estimate defined "nuclear weapons program" as "nuclear weapon design and weaponization work and covert uranium conversion-related and uranium enrichment related work."

[112] "Reversing Iran's Nuclear Program," Hearing of the Senate Foreign Relations Committee, October 3, 2013.

[113] Transcript of remarks by Secretary Panetta from CBS's 60 Minutes interview, January 29, 2012.

[114] "Unclassified Key Judgments of the National Intelligence Estimate: Iran: Nuclear Intentions and Capabilities," Background Briefing with Senior Intelligence Officials, December 3, 2007.

[115] The White House. "Parameters for a Joint Comprehensive Plan of Action Regarding the Islamic Republic of Iran's Nuclear Program." April 2, 2015.

[116] It is worth noting that no country has ever used a centrifuge facility designed and built for low-enriched uranium production to produce weapons-grade HEU. Therefore, Iran may need a trial-and-error period to determine the proper modifications for its own centrifuge facilities, were Tehran to adapt them for such a purpose.

[117] For a detailed discussion of the variables such estimates must take into account, see *Iran's Nuclear, Chemical, and Biological Capabilities: A Net Assessment*, International Institute for Strategic Studies, 2011, pp. 69-70 and William C. Witt, Christina Walrond, David Albright, and Houston Wood, *Iran's Evolving Breakout Potential*, Institute for Science and International Security, October 8, 2012.

Director of National Intelligence James Clapper during an April 18, 2013, Senate Armed Services Committee hearing. In his February 2016 testimony to Congress, Director Clapper said that

> We continue to assess that Iran's overarching strategic goals of enhancing its security, prestige, and regional influence have led it to pursue capabilities to meet its nuclear energy and technology goals and give it the ability to build missile-deliverable nuclear weapons, if it chooses to do so. Its pursuit of these goals will dictate its level of adherence to the JCPOA over time. We do not know whether Iran will eventually decide to build nuclear weapons.[118]

As noted in the body of this report, U.S. officials have argued that the International Atomic Energy Agency would likely detect an Iranian attempt to use its safeguarded facilities to produce weapons-grade HEU. They have also expressed confidence in the United States' ability to detect covert Iranian enrichment plants.

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[118] *Statement for the Record Worldwide Threat Assessment of the US Intelligence Community*, Senate Armed Services Committee, February 9, 2016.